

Information from the Division of Health Care Finance and Policy

Quarterly Acute Hospital Financial Report, FY05 Q1

Overall, the financial health of the hospital industry remained fairly stable in FY05 Q1. Total profitability improved for the middle and upper quartile hospitals, but deteriorated somewhat for the lower quartile. While close to fifty percent of the state's acute care hospitals operated at a loss, improved non-operating performance helped to mitigate these losses, with more than half of the hospitals reporting higher non-operating gains. The industry demonstrated slightly improved liquidity, with nearly all hospitals comfortably able to meet short-term obligations. In addition, solvency improved for most of the industry; however, the ability to cover long-term obligations remained a serious concern for more than a quarter of Massachusetts hospitals.

About this Report

The Division of Health Care Finance and Policy (the Division) publishes quarterly acute hospital financial reports in response to a legislative mandate to provide an annual assessment of financial trends in the acute care hospital industry. Quarterly reporting is one part of the Division's ongoing program to better protect the public interest by continuously monitoring the financial condition of acute care hospitals. This report presents an industry-wide analysis of from FY01 through FY05 Quarter 1 (Q1).¹ Financial trends for individual hospitals are on each hospital's Fact Sheet in the DHCfP Data Catalog at www.mass.gov/dhcfp.

Trends in financial ratio analysis can provide useful information about the hospital industry's financial condition. The three areas examined on a quarterly basis and discussed in this report are profitability, liquidity, and solvency.²

Profitability

Although most Massachusetts acute care hospitals are non-profit, they do need to generate a sufficient surplus in order to complete their missions, repay debt, and invest in the future of their organizations. Therefore, an analysis of the industry's

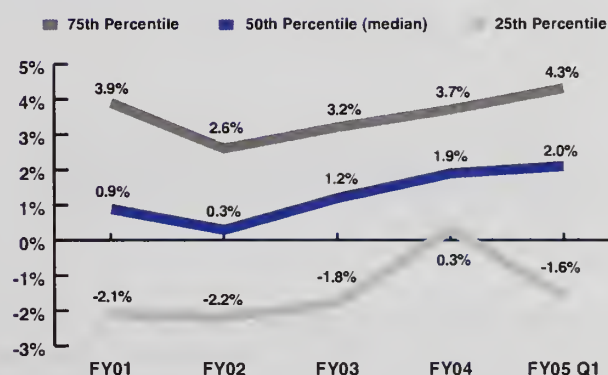
profitability using three key ratios is reported here. Figures 1, 2, and 3 show FY01 through FY05 Q1 trends for 25th, 50th (median) and 75th quartile values³ for Total Margin,⁴ Operating Margin,⁵ and Non-operating Margin.⁶

Total profitability increased for the middle and upper quartiles in FY05 Q1, but fell below zero (-1.6%) for the lowest quartile. Operating performance also declined across the industry in FY05 Q1, but was favorable compared to FY04 Q1 (see Figure 2). Non-operating gains increased across all quartiles (see Figure 3), mitigating some of these operating losses.

Liquidity

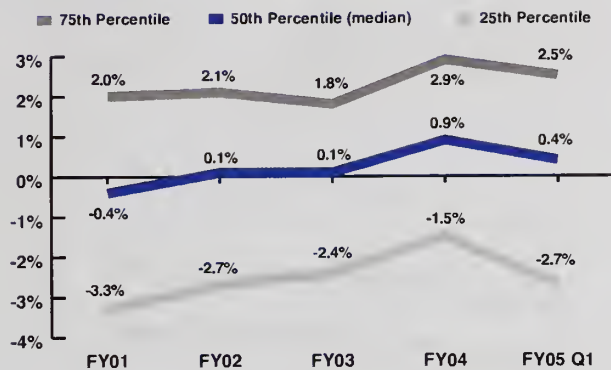
Liquidity ratios indicate a hospital's ability to meet its short-term obligations. Deterioration of these ratios is one indication of financial stress. Three liquidity ratios are reported here:

Figure 1
Total Margin Trend, FY01-FY05 Q1



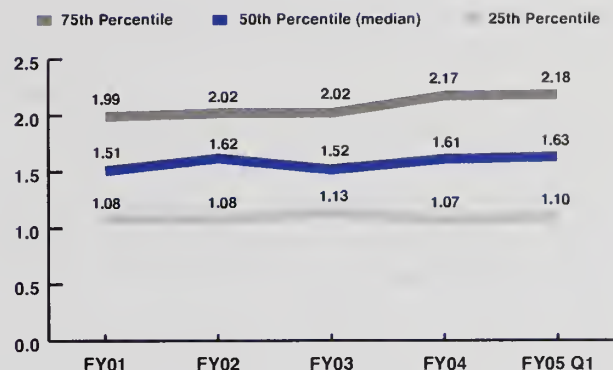
- Overall profitability remained fairly stable for the industry in FY05 Q1; total profitability improved for the middle and upper quartiles, but deteriorated somewhat for the lower quartile hospitals.

Figure 2
Operating Margin Trend, FY01-FY05 Q1



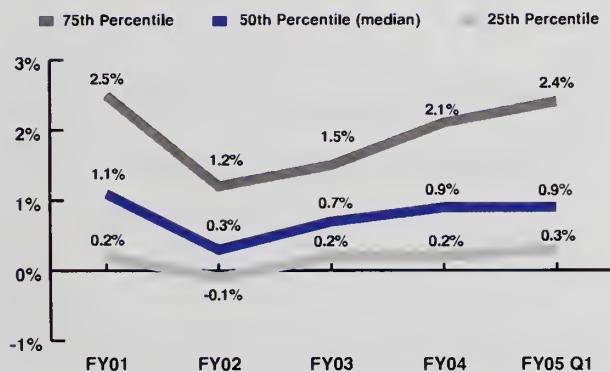
- While operating performance dipped somewhat relative to FY04 for all three quartiles, the FY05 Q1 performance was favorable compared to FY04 Q1.

Figure 4
Current Ratio Trend, FY01-FY05 Q1



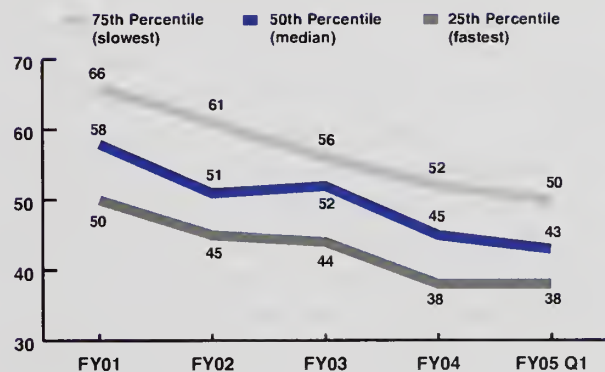
- Current Ratio improved slightly across the industry. A majority of hospitals (79%) maintained Current Ratios above the 1.0 benchmark in FY05 Q1.

Figure 3
Non-operating Margin Trend, FY01-FY05 Q1



- Fueled by improved market conditions, Non-operating Margins improved across all quartiles. No hospitals reported non-operating losses in FY05 Q1.

Figure 5
Days in Accounts Receivable Trend, FY01-FY05 Q1



- Continuing the industry's positive trend since FY00, hospitals continued to improve collection of receivables in FY05 Q1. Median Days in A/R decreased by two days over FY04.

Current Ratio,⁷ Average Days in Accounts Receivable (A/R),⁸ and Average Payment Period.⁹ Figures 4, 5, and 6 show trends in quartile values for these three ratios.

The majority of hospitals demonstrated more favorable short-term liquidity in FY05 Q1 over FY04 and a stronger ability to meet current obligations. Current Ratio improved for most of the industry, with the majority of hospitals (79%)

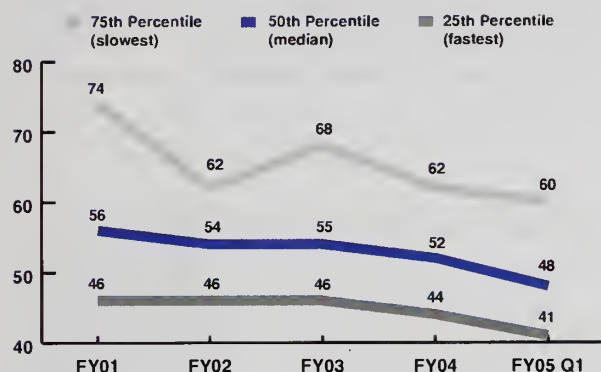
performing above the 1.0 minimum benchmark and all quartiles showing increases in FY05 Q1 (see Figure 4).¹⁰ In addition, the industry showed more efficient management of Days in A/R (see Figure 5) and improvement in the average time to pay current liabilities (Average Payment Period, see Figure 6) across all quartiles. Nearly a fifth of hospitals, however, are paying current obligations at a faster rate than they are collect-



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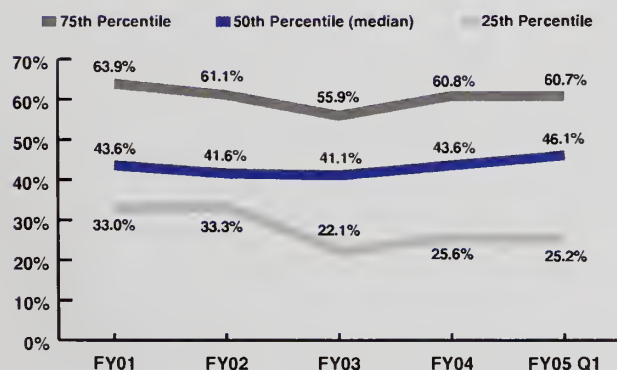
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Figure 6
Average Payment Period Trend in Days,
FY01-FY05 Q1



- Average Payment Period decreased across all quartiles in FY05 Q1; however, nearly a fifth of hospitals paid current obligations at a faster rate than they collected receivables.

Figure 7
Equity Financing Trend, FY01-FY05 Q1



- Equity Financing Ratios improved slightly for most of the industry in FY05 Q1; however, over a quarter of the hospitals were below the 30% benchmark. The highly leveraged position of some hospitals may make future asset acquisition difficult for this group.

ing payments; this could lead to cash flow constraints for this group of hospitals in the future.

Solvency

Solvency ratios provide information regarding both how an organization finances its assets and how able an organization is to take on new debt. Deterioration of these ratios is another

indication of problems in the financial health of an organization. Solvency ratios of Debt Service Coverage and Cash Flow to Total Debt are not included in this report because annualized data are necessary to accurately present these ratios. For quarterly analysis, only one solvency ratio is reported: Equity Financing.¹¹

The Equity Financing ratio, measured by the proportion of total assets financed by equity, reflects the ability of a hospital to take on more debt. Low values indicate that a hospital is highly leveraged, and therefore, may have difficulty securing access to debt financing for further asset acquisition. Equity Financing improved for the majority of hospitals in FY05 Q1 compared to FY04; however this ratio was below the 30% industry benchmark for more than a quarter of the hospitals, indicating long-term solvency issues for this group.

Teaching versus Non-teaching Hospitals

The Division also examines the financial health of teaching and non-teaching hospitals using financial ratio analysis. In terms of profitability, teaching hospitals outperformed non-teaching hospitals, with a lower percentage of teaching hospitals experiencing overall losses. Non-teaching hospitals showed some improvement in non-operating performance; however, a larger percentage reported operating losses in FY05 Q1 versus FY04 (51% versus 43%).

Teaching hospitals showed a slightly stronger liquidity position compared to non-teaching hospitals. On average, Current Ratio was higher for teaching hospitals; but a higher percentage (33%) of teaching hospitals had Current Ratios below the minimum industry benchmark of 1.0 (compared to 19% of non-teaching hospitals). Both teaching and non-teaching hospitals exhibited comparable improvement in collecting receivables due and paying current obligations.

Non-teaching hospitals may have more difficulty meeting interest and principal payments in the upcoming year as nearly a third were below the 30% benchmark for Equity Financing in FY05 Q1. Although non-teaching hospitals were slightly more leveraged than teaching hospitals, no improvements in Equity Financing were found for either group in the first quarter of FY05.

Summary

Overall profitability remained fairly stable for a majority of the industry in FY05 Q1, although one-third of the hospitals experienced total losses. Dips in operating performance were mitigated by gains in non-operating performance. Overall, the industry demonstrated slightly improved liquidity, with nearly

all hospitals comfortably able to meet short-term obligations. In addition, solvency improved for most of the industry; however, the ability to cover long-term obligations remained a serious concern for over a quarter of Massachusetts hospitals.

Financial ratio values for each hospital are on the Hospital Fact Sheets in the Division of Health Care Finance and Policy

Data Catalog at www.mass.gov/dhcfp. Hospital-specific dollar surplus or loss, net patient service revenue, total net assets, and assets whose use is limited are also provided on the Hospital Fact Sheets illustrating the magnitude of hospital surplus and loss, the size of operation, and the size of reserves.

¹ The findings in this report are based on the financial filings of 63 acute care hospitals. Three hospitals (Mercy, MetroWest, and St. Vincent) have a fiscal year that ends on December 31, thus FY05 Q1 data were unavailable at the time of this analysis. Salem and Union hospitals are no longer reported individually since North Shore Medical Center now includes both Salem and Union Hospital information.

² Depending on the organization of each hospital, data may exclude other aspects of some hospitals' financial health, such as performance of endowments or the financial health of parent or other affiliated organizations.

³ Quartile values can shed light on information about the distribution of financial ratio values across hospitals. Often, averages can be materially affected by outlier/extreme values at the low and high ends of a distribution. Examining quartiles, therefore, is a preferred means of assessing the overall distribution of values across hospitals. For instance, the ratio values of one-quarter of the hospitals at the low end of the distribution will fall at or below the 25th quartile value. Similarly, the ratio values of one-quarter of the hospitals at the high end of the distribution will fall at or above the 75th quartile value. The 50th percentile is the median, or the center of the distribution of values. Half of the hospitals' financial ratio values will fall below the median, and half will fall above the median. These quartile measures are particularly useful when a distribution is markedly skewed, or where it is generally symmetrical but includes a few outliers.

⁴ Ratio of total income to total revenue.

⁵ Ratio of operating income to total revenue.

⁶ Ratio of non-operating income to total revenue.

⁷ Ratio of current assets to current liabilities.

⁸ Ratio of net patient accounts receivable to net patient service revenue/quarters of data * 91.25.

⁹ Ratio of current liabilities less estimated third-party settlements to total expenses less depreciation and amortization/quarters of data * 91.25.

¹⁰ A Current Ratio value of 1.0 indicates that a hospital has one dollar held in current assets per dollar of current liabilities. Values below 1.0 are considered strongly unfavorable and highlight an organization's illiquid position.

¹¹ Ratio of total net assets to total assets.

Information from the Division of Health Care Finance and Policy

Quarterly Acute Hospital Financial Report, FY05 Q3

Overall, the financial health of the hospital industry showed improvement in FY05 Q3. Total profitability continued to improve for all three quartiles. The industry also demonstrated sustained improvements in liquidity, with nearly all hospitals comfortably able to meet short-term obligations. In addition, solvency improved for most of the industry; however, the ability to cover long-term obligations remained a serious concern for 31% of Massachusetts hospitals.

About this Report

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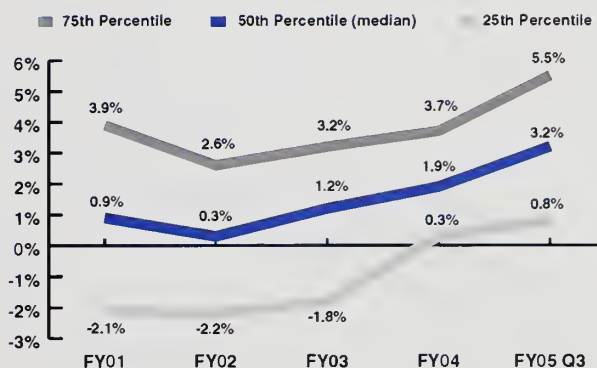
Trends in financial ratio analysis can provide useful information about the hospital industry's financial condition. The three areas examined on a quarterly basis are profitability, liquidity, and solvency.²

Profitability

Although most Massachusetts acute care hospitals are non-profit, they do need to generate a sufficient surplus in order to complete their missions, repay debt, and invest in the future of their organizations. Therefore, an analysis of the industry's profitability using three key ratios is reported here. Figures 1, 2, and 3 show FY01 through FY05 Q3 trends for 25th, 50th (median) and 75th quartile values³ for Total Margin,⁴ Operating Margin,⁵ and Non-operating Margin.⁶

Total profitability improved and was positive for all three quartiles in FY05 Q3 compared to FY04, with only 12 hospitals experiencing total losses. Operating Margin and Non-operating Margins also improved across all quartiles, with 34% of hospitals reporting operating losses and only two hospitals reporting non-operating losses in FY05 Q3.

Figure 1
Total Margin Trend, FY01-FY05 Q3

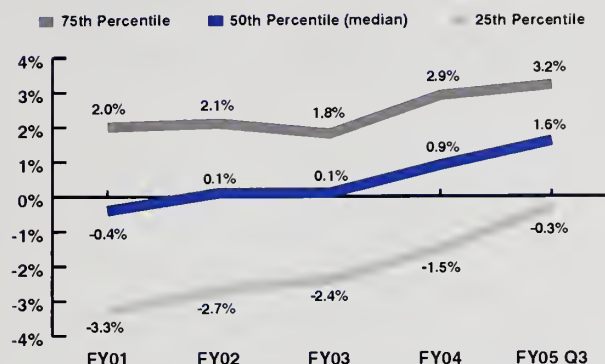


- Overall profitability improved for the majority of the industry in FY05 Q3. Total Margin was positive and increased for all three quartiles.

Liquidity

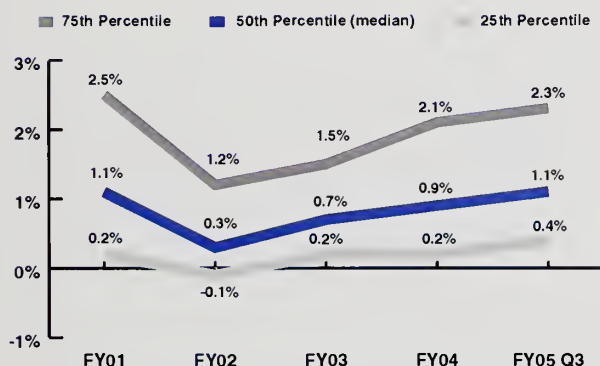
Liquidity ratios indicate a hospital's ability to meet its short-term obligations. Deterioration of these ratios is one indication of financial stress. Three liquidity ratios are reported here: Current Ratio,⁷ Average Days in Accounts Receivable (A/R),⁸ and Average Payment Period.⁹ Figures 4, 5, and 6 show trends in quartile values for these three ratios.

Figure 2
Operating Margin Trend, FY01-FY05 Q3



- Operating performance continued to improve across the industry in FY05 Q3. Although 34% of the hospitals were still experiencing operating losses in FY05 Q3, this was an improvement over FY04 (42%).

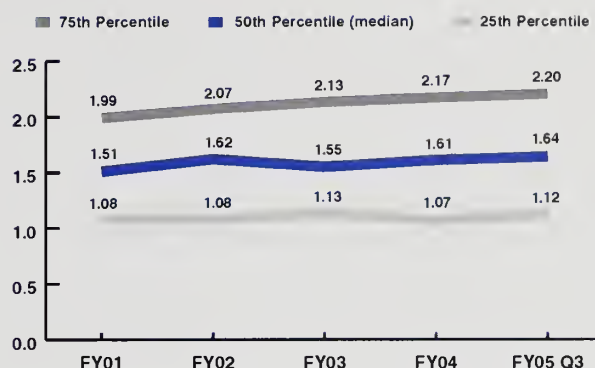
Figure 3
Non-operating Margin Trend, FY01-FY05 Q3



- Non-operating Margin improved in FY05 Q3. Fueled by improved market conditions, only two hospitals reported non-operating losses in FY05 Q3.

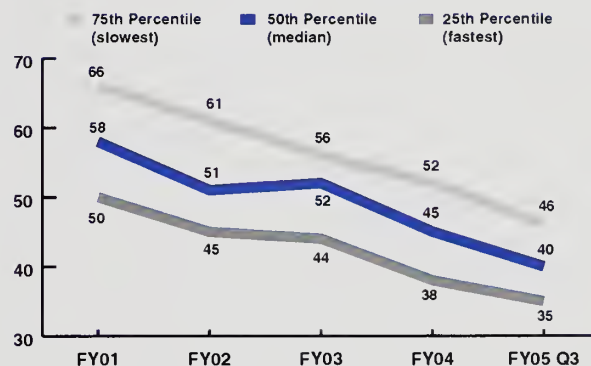
The majority of hospitals demonstrated more favorable short-term liquidity in FY05 Q3 over FY04 and a stronger ability to meet current obligations. Current Ratio continued to improve for most of the industry, with the majority of hospitals (85%) performing above the 1.0 minimum benchmark and all quartiles showing increases in FY05 Q3 (see Figure 4).¹⁰ In addition, the industry showed more efficient manage-

Figure 4
Current Ratio Trend, FY01-FY05 Q3



- Current Ratio improved slightly across the industry. Most of the hospitals (85%) maintained Current Ratios above the 1.0 benchmark in FY05 Q3.

Figure 5
Days in Accounts Receivable Trend, FY01-FY05 Q3

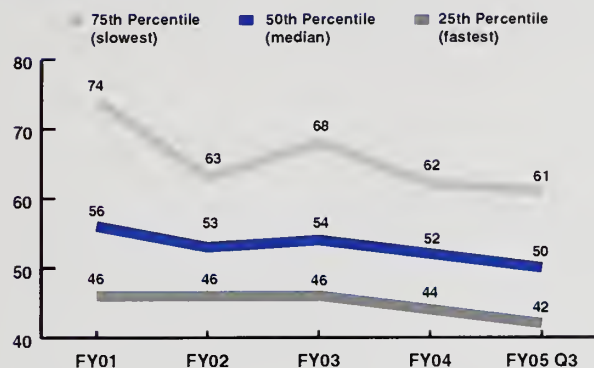


- Continuing the industry's positive trend since FY01, hospitals again improved collection of receivables in FY05 Q3. Median Days in A/R decreased by five days over FY04.

ment of Days in A/R (see Figure 5) and improvement in the average time to pay current liabilities (Average Payment Period, see Figure 6) across all quartiles. Hospitals paying current obligations at a faster rate than they are collecting payments dropped from 40% in FY05 Q2 to 26% in FY05 Q3, indicating fewer hospitals with potential cash flow constraints in the future.

Figure 6

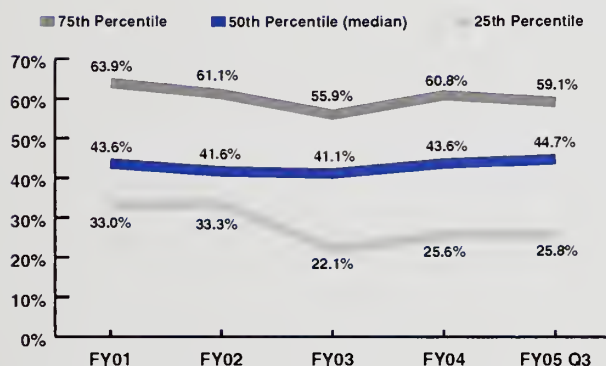
Average Payment Period Trend in Days, FY01-FY05 Q3



- Average Payment Period decreased across all quartiles in FY05 Q3; however, 26% of hospitals paid current obligations at a faster rate than they collected receivables.

Figure 7

Equity Financing Trend, FY01-FY05 Q3



- Equity Financing Ratios improved slightly for most of the industry in FY05 Q3; however, just under one-third of the hospitals were below the 30% benchmark. The highly leveraged position of some hospitals may make future asset acquisition difficult for this group.

Solvency

Solvency ratios provide information regarding both how an organization finances its assets and how able an organization is to take on new debt. Deterioration of these ratios is another indication of problems in the financial health of an organization. Solvency ratios of Debt Service Coverage and Cash Flow to Total Debt are not included in this report because annual-

ized data are necessary to accurately present these ratios. For quarterly analysis, only one solvency ratio is reported: Equity Financing.¹¹

The Equity Financing ratio, measured by the proportion of total assets financed by equity, reflects the ability of a hospital to take on more debt. Low values indicate that a hospital is highly leveraged, and therefore, may have difficulty securing access to debt financing for further asset acquisition. Equity Financing improved slightly in FY05 Q3 compared to FY04, with the middle and lower quartiles showing a very slight increase, and the upper quartile showing a slight decrease. However, this ratio is below the 30% industry benchmark for 30% of the hospitals, indicating long-term solvency issues for this group.

Teaching versus Non-teaching Hospitals

The Division also examines the financial health of teaching and non-teaching hospitals using financial ratio analysis. In terms of operating profitability, teaching hospitals outperformed non-teaching hospitals, with a lower percentage of teaching hospitals (27%) versus non-teaching hospitals (38%) experiencing operating losses. However, a larger percentage of teaching hospitals (7%) versus non-teaching hospitals (2%) experienced non-operating losses. In terms of overall profitability, non-teaching hospitals fared slightly better with 18% experiencing overall losses versus 20% of teaching hospitals experiencing overall losses.

Teaching hospitals showed a slightly stronger liquidity position compared to non-teaching hospitals. On average, Current Ratio was higher for teaching hospitals; but a higher percentage (27%) of teaching hospitals had Current Ratios below the minimum industry benchmark of 1.0 (compared to 12% of non-teaching hospitals). Both teaching and non-teaching hospitals exhibited comparable improvement in collecting receivables due and paying current obligations.

In terms of solvency, non-teaching hospitals were slightly more leveraged as 47% of non-teaching hospitals (versus 20% of teaching hospitals) were below the 30% benchmark for Equity Financing in FY05 Q3. Equity Financing remained fairly stable for both groups in FY05 Q3 compared to FY04.

Summary

The majority of hospitals reported improved overall profitability in FY05 Q3, with only 19% experiencing total losses. Overall, the industry demonstrated slightly improved liquidity, with nearly all hospitals comfortably able to meet short-term obligations. In addition, solvency improved for most of

the industry; however, the ability to cover long-term obligations remained a serious concern for close to one-third of Massachusetts hospitals.

Financial ratio values for each hospital are on the Hospital Fact Sheets in the Division of Health Care Finance and Policy

Data Catalog at www.mass.gov/dhcfp. Hospital-specific dollar surplus or loss, net patient service revenue, total net assets, and assets whose use is limited are also provided on the Hospital Fact Sheets illustrating the magnitude of hospital surplus and loss, the size of operation, and the size of reserves.

¹ The findings in this report are based on the financial filings of 64 acute care hospitals. Children's Hospital and Beth Israel Deaconess Hospital – Needham did not submit their filings in time for this report. Three hospitals (Mercy, MetroWest, and St. Vincent) have a fiscal year that ends on December 31, thus their most recent filings represent the first six months rather than the first nine months of FY05. Martha's Vineyard's fiscal year ends on March 31, therefore the data included in this report represents the entire 12 months of FY05. Cambridge Health Alliance's fiscal year ends on June 31, therefore the data included in this report represents 12 months of FY05.

² Depending on the organization of each hospital, data may exclude other aspects of some hospitals' financial health, such as performance of endowments or the financial health of parent or other affiliated organizations.

³ Quartile values can shed light on information about the distribution of financial ratio values across hospitals. Often, averages can be materially affected by outlier/extreme values at the low and high ends of a distribution. Examining quartiles, therefore, is a preferred means of assessing the overall distribution of values across hospitals. For instance, the ratio values of one-quarter of the hospitals at the low end of the distribution will fall at or below the 25th quartile value. Similarly, the ratio values of one-quarter of the hospitals at the high end of the distribution will fall at or above the 75th quartile value. The 50th percentile is the median, or the center of the distribution of values. Half of the hospitals' financial ratio values will fall below the median, and half will fall above the median. These quartile measures are particularly useful when a distribution is markedly skewed, or where it is generally symmetrical but includes a few outliers.

⁴ Ratio of total income to total revenue.

⁵ Ratio of operating income to total revenue.

⁶ Ratio of non-operating income to total revenue.

⁷ Ratio of current assets to current liabilities.

⁸ Ratio of net patient accounts receivable to net patient service revenue/quarters of data * 273.75.

⁹ Ratio of current liabilities less estimated third-party settlements to total expenses less depreciation and amortization/quarters of data * 273.75.

¹⁰ A Current Ratio value of 1.0 indicates that a hospital has one dollar held in current assets per dollar of current liabilities. Values below 1.0 are considered strongly unfavorable and highlight an organization's illiquid position.

¹¹ Ratio of total net assets to total assets.

Information from the Division of Health Care Finance and Policy

Quarterly Acute Hospital Financial Report, FY05 Q4

The financial health of the hospital industry showed significant improvement in FY05 Q4. Overall profitability improved substantially for the industry as a whole. Hospitals also demonstrated sustained improvements in liquidity, with nearly all hospitals comfortably able to meet short-term obligations. In addition, solvency improved for most of the industry; however, the ability to cover long-term obligations remains a serious concern for one-third of Massachusetts hospitals.

About this Report

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Trends in financial ratio analysis can provide useful information about the hospital industry's financial condition. The three areas examined on a quarterly basis are profitability, liquidity, and solvency.²

Profitability

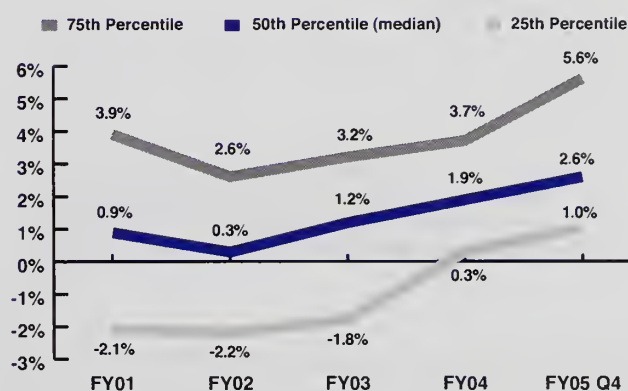
Although most Massachusetts acute care hospitals are non-profit, they do need to generate a sufficient surplus in order to complete their missions, repay debt, and invest in the future of their organizations. Therefore, an analysis of the industry's profitability using three key ratios is reported here. Figures 1, 2, and 3 show FY01 through FY05 Q4 trends for 25th, 50th (median) and 75th quartile values³ for Total Margin,⁴ Operating Margin,⁵ and Non-operating Margin.⁶

Total profitability improved significantly for all three quartiles in FY05 Q4 compared to FY04, with 86% of hospitals experiencing positive total margins (up from 79% in FY04), and only 14% experiencing a total loss (versus 21% in FY04). Operating Margins also improved across all quartiles, with 77% (versus 58% in FY04) reporting operating gains, and 23% (versus 42% in FY04) reporting operating losses. Non-operating Margins also improved in the middle and lower quartiles, with 95% of hospitals (versus 88% in FY04) experiencing non-operating gains, and only 5% (versus 12% in FY04) experiencing non-operating losses.

Liquidity

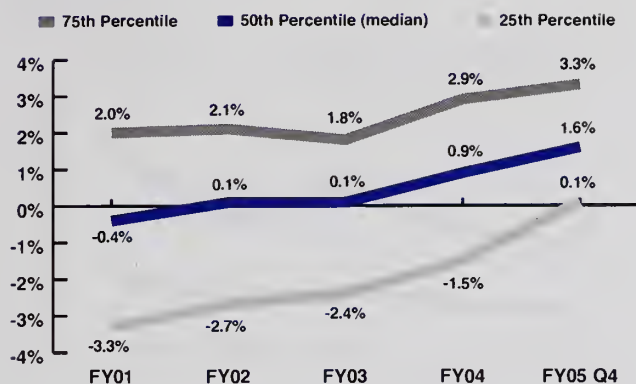
Liquidity ratios indicate a hospital's ability to meet its short-term obligations. Deterioration of these ratios is one indica-

Figure 1
Total Margin Trend, FY01-FY05 Q4



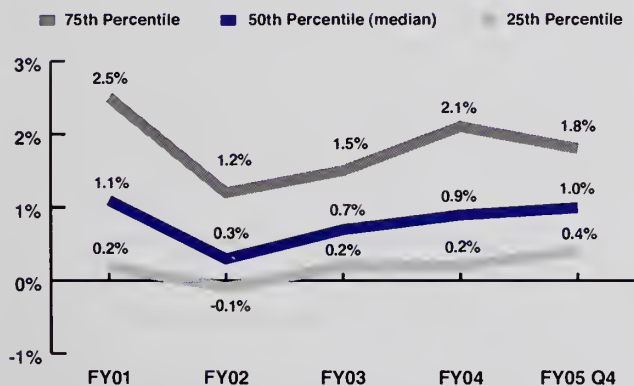
- Overall profitability improved across all three quartiles in FY05 Q4, with 86% of hospitals experiencing total gains, and 14% experiencing total losses.

Figure 2
Operating Margin Trend, FY01-FY05 Q4



- Operating performance continued to improve across the industry in FY05 Q4, with 77% of hospitals experiencing operating gains and 23% experiencing operating losses.

Figure 3
Non-operating Margin Trend, FY01-FY05 Q4

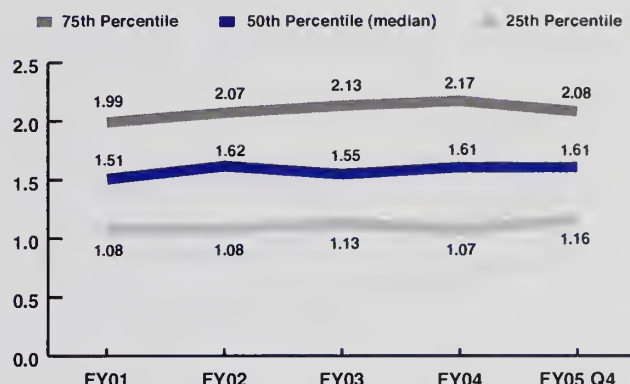


- Non-operating Margin improved for the lower and middle quartiles in FY05 Q4, with 95% of hospitals experiencing non-operating gains and 5% experiencing non-operating losses.

tion of financial stress. Three liquidity ratios are reported here: Current Ratio,⁷ Average Days in Accounts Receivable (A/R),⁸ and Average Payment Period.⁹ Figures 4, 5, and 6 show trends in quartile values for these three ratios.

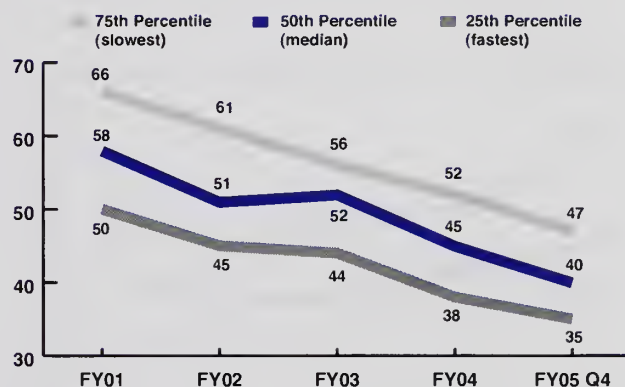
The majority of hospitals demonstrated favorable short-term liquidity in FY05 Q4. The lower quartile showed improvement in Current Ratio. Although the middle

Figure 4
Current Ratio Trend, FY01-FY05 Q4



- Current Ratio improved for the lower quartile, remained constant for the middle quartile, and decreased slightly for the upper quartile. A large majority of hospitals (82%) continued to maintain Current Ratios above the 1.0 benchmark in FY05 Q4.

Figure 5
Days in Accounts Receivable Trend, FY01-FY05 Q4

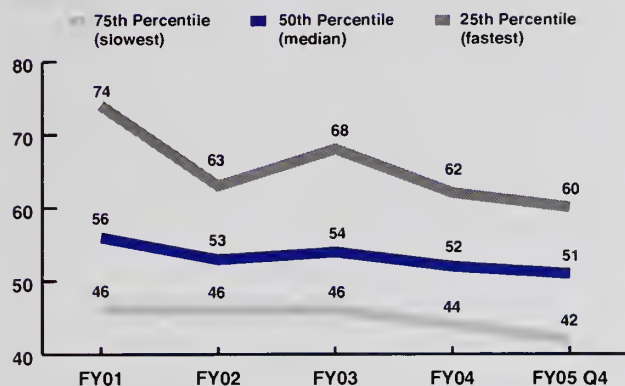


- Continuing the industry's positive trend since FY01, hospitals again improved collection of receivables in FY05 Q4, with decreases across all three quartiles. Median Days in Accounts Receivable decreased by five days.

quartile remained constant and there was a small decrease in the upper quartile, these values remained above the industry benchmark (see Figure 4).¹⁰ In addition, the industry showed more efficient management of Days in A/R (see Figure 5) and improvement in the average time to pay current liabilities (Average Payment Period, see Figure 6) across all quartiles.

Figure 6

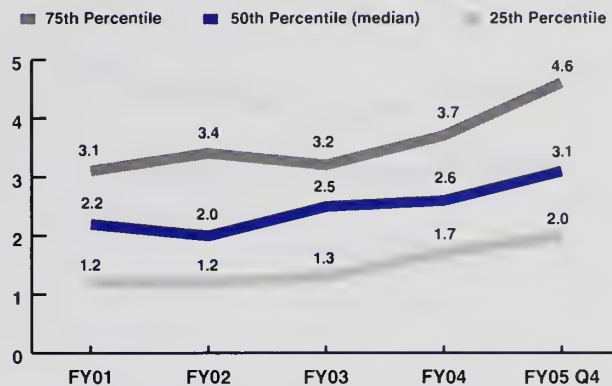
Average Payment Period Trend in Days, FY01-FY05 Q4



- Average Payment Period decreased across all quartiles in FY05 Q4; however, 27% of hospitals paid current obligations at a faster rate than they collected receivables.

Figure 7

Debt Service Coverage Total Trend, FY01-FY05 Q4



- Debt Service Coverage improved across all quartiles. In addition, the percent of the industry facing potential difficulty covering interest and principle payments in the upcoming year dropped from 20% in FY04 to 10% in FY05 Q4.

Solvency

Solvency ratios provide information regarding both how an organization finances its assets and how able an organization is to take on new debt. Deterioration of these ratios is another indication of problems in the financial health of an organization. For the fourth quarterly analysis, three solvency ratios are reported: Debt Service Coverage¹¹, Cash Flow to Total Debt¹², and Equity Financing.¹³ Figures 7, 8, and 9 show trends in quartile values for these three ratios.

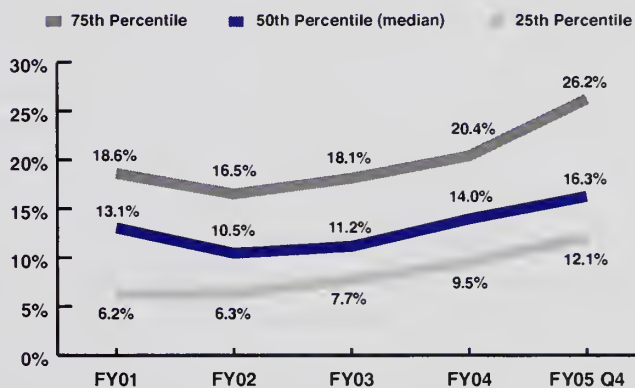
Debt Service Coverage, which measures the ability to meet principal and interest payments in the upcoming year, improved for the entire industry in FY05 Q4. All hospitals but one showed positive ratios, and all quartiles remained above the 1.5 benchmark. Further, only six hospitals exhibited Debt Service Coverage ratios below the 1.5 benchmark (see Figure 7).

Cash Flow to Total Debt is the measure of a hospital's percentage of cash flow to current and long term debt obligations and a known indicator of future financial distress and insolvency. This solvency indicator improved across all quartiles in FY05 Q4 versus FY04 (see Figure 8). Improvements were largely attributable to enhanced overall profitability for the industry.

The Equity Financing ratio, measured by the proportion of total assets financed by equity, reflects the ability of a hospital to take on more debt. Low values indicate that a hospital is highly leveraged, and therefore, may have difficulty

Figure 8

Cash Flow to Total Debt Trend, FY01-FY05 Q4



- Cash Flow to Total Debt improved substantially across the industry in FY05 Q4. Improvements were largely due to enhanced profitability for the industry.

securing access to debt financing for further asset acquisition. Equity Financing remained fairly constant in FY05 Q4 compared to FY04. A large proportion of the industry was above the 30% benchmark, and long term solvency remained favorable for this group; however, this ratio was below the 30% industry benchmark for the other 31% of the hospitals,

indicating potential long-term solvency issues for this group (see Figure 9).

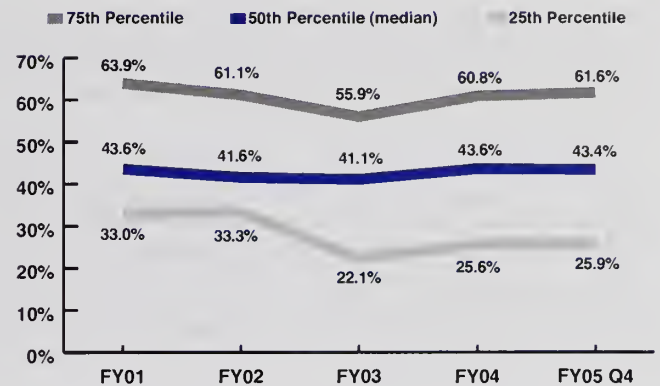
Teaching versus Non-teaching Hospitals

The Division of Health Care Finance and Policy also examines the financial health of teaching versus non-teaching hospitals using financial ratio analysis. Overall, teaching hospitals outperformed non-teaching hospitals in terms of profit levels; however, a slightly higher percentage of non-teaching hospitals (78%) versus teaching hospitals (73%) generated an operating surplus in FY05 Q4. In addition, a larger percentage of non-teaching hospitals (98%) versus teaching hospitals (87%) experienced non-operating gains. In terms of overall profitability, teaching hospitals fared better because many hospitals were able to offset operating losses with large non-operating gains. Overall, 93% of teaching hospitals generated total gains in FY05 Q4, versus 84% of non-teaching hospitals.

Results between the two groups were mixed with regard to liquidity. On average, Current Ratio was higher for teaching hospitals; however, a higher percentage (84%) of non-teaching hospitals had Current Ratios above the minimum industry benchmark of 1.0 (compared to 79% of teaching hospitals). In terms of collecting receivables due and paying current obligations, the results were mixed depending on the quartile.

In terms of solvency, teaching hospitals are generally stronger. A higher percentage of teaching hospitals—92% versus 82% for non-teaching hospitals—will have less difficulty meeting interest and principal payments in the upcoming year. With the exception of the upper quartile, teaching hospitals also performed better in terms of repaying current and non-current debt. Finally, teaching hospitals were substantially less leveraged as 79% (versus 66% of non-teaching hospitals) were above the 30% benchmark for Equity Financing.

Figure 9
Equity Financing Trend, FY01-FY05 Q4



- Equity Financing Ratios remained fairly constant in FY05 Q4. However, just under one-third of the hospitals were below the 30% benchmark and the highly leveraged position of these hospitals may make future asset acquisition difficult for this group.

Summary

The majority of hospitals reported improved overall profitability in FY05 Q4, with 86% experiencing total gains and only 14% of the industry experiencing total losses. Overall, the industry demonstrated improved liquidity, with nearly all hospitals comfortably able to meet short-term obligations. In addition, solvency improved for most of the industry; however, the ability to cover long-term obligations remains a serious concern for one-third of Massachusetts hospitals.

Financial ratios for each hospital are on the Hospital Fact Sheets in the DHCFP Data Catalog at www.mass.gov/dhcfp. Hospital-specific dollar surplus or loss, net patient service revenue, total net assets, and assets whose use is limited are also provided on the Fact Sheets illustrating the magnitude of hospital surplus and loss, the size of operation, and the size of reserves.

Endnotes

- ¹ The findings in this report are based on the financial filings of 65 acute care hospitals. One hospital—Children's Hospital Boston—did not submit its filing in time to be included in this report. Another hospital—Boston Medical Center—did not file a Balance Sheet or a Statement of Cash Flows. One hospital (Mercy Medical Center) has a fiscal year that ends on December 31, thus their most recent filing represents the first nine months rather than the 12 months of FY05. Due to the Vanguard purchase of MetroWest and Saint Vincent's hospitals, the fiscal year filings submitted represent six months of operation.
- ² Depending on the organization of each hospital, data may exclude other aspects of some hospitals' financial health, such as performance of endowments or the financial health of parent or other affiliated organizations.
- ³ Quartile values can shed light on information about the distribution of financial ratio values across hospitals. Often, averages can be materially affected by outlier/extreme values at the low and high ends of a distribution. Examining quartiles, therefore, is a preferred means of assessing the overall distribution of values across hospitals. For instance, the ratio values of one-quarter of the hospitals at the low end of the distribution will fall at or below the 25th quartile value. Similarly, the ratio values of one-quarter of the hospitals at the high end of the distribution will fall at or above the 75th quartile value. The 50th percentile is the median, or the center of the distribution of values. Half of the hospitals' financial ratio values will fall below the median, and half will fall above the median. These quartile measures are particularly useful when a distribution is markedly skewed, or where it is generally symmetrical but includes a few outliers.
- ⁴ Ratio of total income to total revenue.
- ⁵ Ratio of operating income to total revenue.
- ⁶ Ratio of non-operating income to total revenue.
- ⁷ Ratio of current assets to current liabilities.
- ⁸ Ratio of net patient accounts receivable to net patient service revenue/quarters of data * 273.75.
- ⁹ Ratio of current liabilities less estimated third-party settlements to total expenses less depreciation and amortization/quarters of data * 273.75.
- ¹⁰ A Current Ratio value of 1.0 indicates that a hospital has one dollar held in current assets per dollar of current liabilities. Values below 1.0 are considered strongly unfavorable and highlight an organization's illiquid position.
- ¹¹ Ratio of total income plus interest expense plus depreciation and amortization to interest expense plus current portion of long-term debt.
- ¹² Ratio of total income plus depreciation and amortization to total current liabilities plus total long-term debt.
- ¹³ Ratio of total net assets to total assets.

Information from the Division of Health Care Finance and Policy

FY05 Annual Acute Hospital Financial Report

The financial health of the hospital industry showed significant improvement in FY05. Overall profitability improved across the industry. Hospitals also demonstrated sustained improvements in liquidity, with a majority of hospitals comfortably able to meet short-term obligations. In addition, solvency improved for most of the industry; however, the ability to cover long-term obligations remained a serious concern for one-third of Massachusetts hospitals.

About this Report

The Division of Health Care Finance and Policy (the Division) publishes quarterly and annual acute hospital financial reports in response to a legislative mandate to provide an annual assessment of financial trends in the acute care hospital industry. Quarterly reporting is one part of the Division's ongoing program to better protect the public interest by continuously monitoring the financial condition of acute care hospitals. This report presents an industry-wide analysis of audited data from FY01 through FY05.¹ Financial trends for individual hospitals are on each hospital's Fact Sheet in the DHCFP Data Catalog at www.mass.gov/dhcfp.

Trends in financial ratio analysis can provide useful information about the hospital industry's financial condition. The three areas examined on a quarterly and annual basis are profitability, liquidity, and solvency.²

Profitability

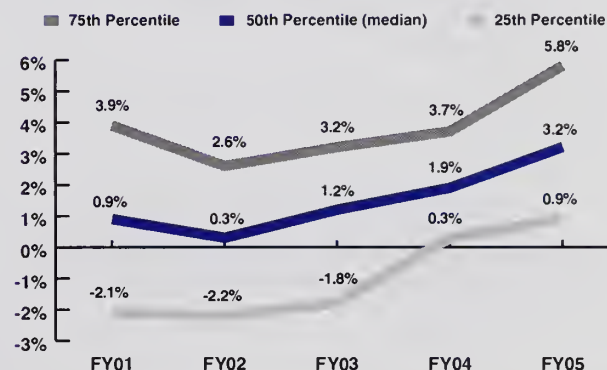
Although most Massachusetts acute care hospitals are non-profit, they do need to generate a sufficient surplus in order to complete their missions, repay debt, and invest in the future of their organizations. Therefore, an analysis of the industry's profitability using three key ratios is reported here. Figures 1, 2, and 3 show FY01 through FY05 trends for 25th, 50th (median) and 75th quartile values³ for Total Margin,⁴ Operating Margin,⁵ and Non-operating Margin.⁶

Total profitability improved significantly for all three quartiles in FY05 compared to FY04, with 80% of hospitals experiencing positive total margins (up slightly from 79% in FY04). Operating Margins also improved across all quartiles, with 71% (versus 58% in FY04) reporting operating gains, and 29% (versus 42% in FY04) reporting operating losses. Non-operating Margins also improved across all three quartiles, with 95% of hospitals (versus 88% in FY04) experiencing non-operating gains, and only 5% (versus 12% in FY04) experiencing non-operating losses..

Liquidity

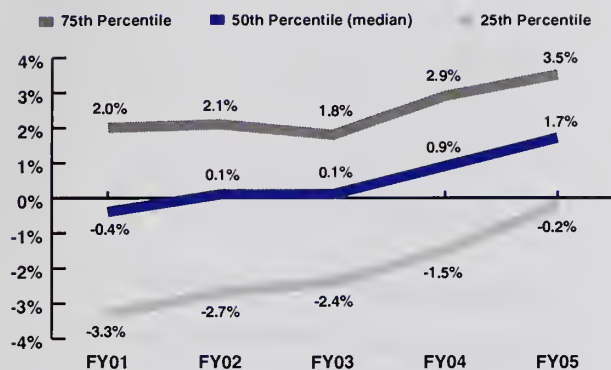
Liquidity ratios indicate a hospital's ability to meet its short-term obligations. Deterioration of these ratios is one indica-

Figure 1
Total Margin Trend, FY01-FY05



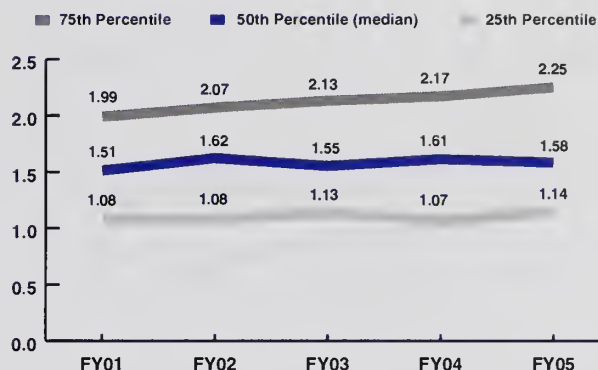
- Overall profitability improved across all three quartiles in FY05, with 80% of hospitals experiencing total gains, and 20% experiencing total losses.

Figure 2
Operating Margin Trend, FY01-FY05



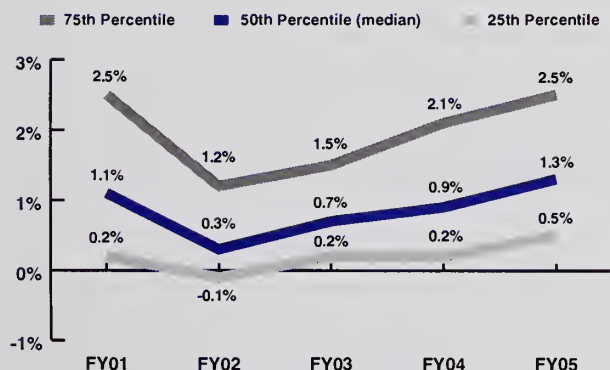
- Operating performance continued to improve across the industry in FY05, with 71% of hospitals experiencing operating gains and 29% experiencing operating losses.

Figure 4
Current Ratio Trend, FY01-FY05



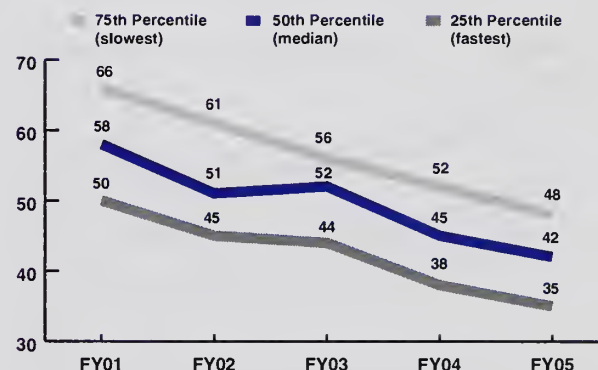
- Current Ratio improved for the upper and lower quartiles, and decreased slightly for the middle quartile. A majority of hospitals (86%) continued to maintain Current Ratios above the 1.0 benchmark in FY05.

Figure 3
Non-operating Margin Trend, FY01-FY05



- Non-operating Margin improved across all quartiles in FY05, with 95% of hospitals experiencing non-operating gains and 5% experiencing non-operating losses.

Figure 5
Days in Accounts Receivable Trend, FY01-FY05



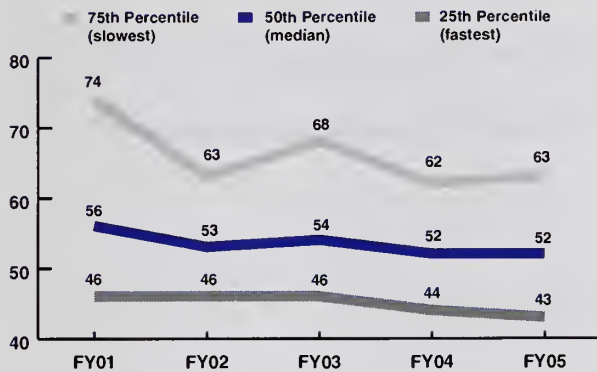
- Continuing the industry's positive trend since FY01, hospitals again improved collection of receivables in FY05, with decreases across all three quartiles. Median Days in Accounts Receivable decreased by three days.

tion of financial stress. Three liquidity ratios are reported here: Current Ratio,⁷ Average Days in Accounts Receivable (A/R),⁸ and Average Payment Period.⁹ Figures 4, 5, and 6 show trends in quartile values for these three ratios.

The majority of hospitals demonstrated favorable short-term liquidity in FY05. The upper and lower quartiles showed

improvement in Current Ratio. Although the middle quartile decreased slightly, these values remained above the industry benchmark (see Figure 4).¹⁰ In addition, the industry showed more efficient management of Days in A/R (see Figure 5) and stability in the average time to pay current liabilities (Average Payment Period, see Figure 6) across all quartiles.

Figure 6
Average Payment Period Trend in Days, FY01-FY05



- Average Payment Period increased by one day in the upper quartile, remained stable in the middle quartile, and decreased by one day in the lower quartile.

Solvency

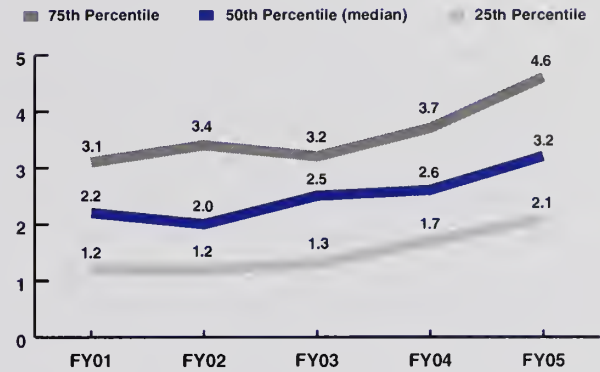
Solvency ratios provide information regarding both how an organization finances its assets and how able an organization is to take on new debt. Deterioration of these ratios is another indication of problems in the financial health of an organization. Three solvency ratios are reported: Debt Service Coverage¹¹, Cash Flow to Total Debt¹², and Equity Financing.¹³ Figures 7, 8, and 9 show trends in quartile values for these three ratios.

Debt Service Coverage, which measures the ability to meet principal and interest payments in the upcoming year, improved for the entire industry in FY05. All but two hospitals showed positive ratios, and all quartiles remained above the 1.5 benchmark. Further, only nine hospitals (versus 12 in FY04) exhibited Debt Service Coverage ratios below the 1.5 benchmark (see Figure 7).

Cash Flow to Total Debt is the measure of a hospital's percentage of cash flow to current and long term debt obligations and a known indicator of future financial distress and insolvency. This solvency indicator improved across all quartiles in FY05 versus FY04 (see Figure 8). Improvements were largely attributable to enhanced overall profitability for the industry.

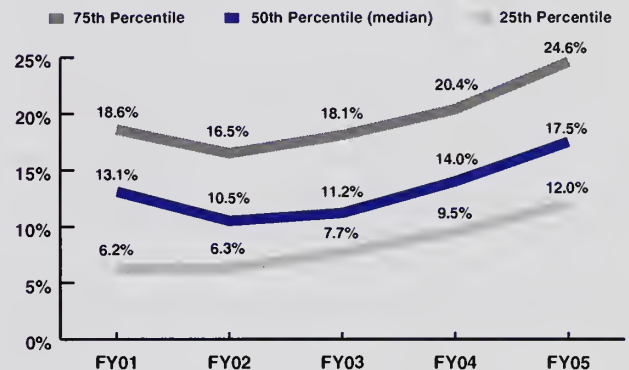
The Equity Financing ratio, measured by the proportion of total assets financed by equity, reflects the ability of a hospital to take on more debt. Low values indicate that a hospital is highly leveraged, and therefore, may have difficulty securing

Figure 7
Debt Service Coverage Total Trend, FY01-FY05



- Debt Service Coverage improved across all quartiles in FY05.

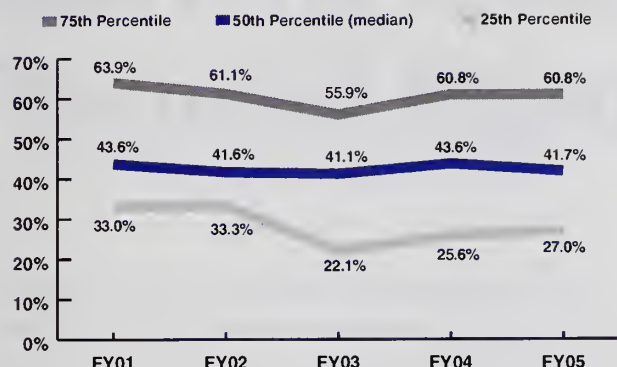
Figure 8
Cash Flow to Total Debt Trend, FY01-FY05



- Cash Flow to Total Debt improved substantially across the industry in FY05. Improvements were largely due to enhanced profitability for the industry.

access to debt financing for further asset acquisition. Equity Financing remained fairly constant in FY05 compared to FY04. Close to 68% of the industry was above the 30% benchmark, and long term solvency remained favorable for this group; however, this ratio was below the 30% industry benchmark for the other 32% of the hospitals, indicating potential long-term solvency issues for this group (see Figure 9).

Figure 9
Equity Financing Trend, FY01-FY05



- **Equity Financing Ratios remained fairly stable in FY05. However, just under one-third of the hospitals were below the 30% benchmark and the highly leveraged position of these hospitals may make future asset acquisition difficult for this group.**

Teaching versus Non-teaching Hospitals

The Division of Health Care Finance and Policy also examines the financial health of teaching versus non-teaching hospitals using financial ratio analysis. Overall, teaching hospitals outperformed non-teaching hospitals across the three quartiles in terms of profit levels, and a higher percentage of teaching hospitals (88%) versus non-teaching hospitals (78%) generated a total surplus. In terms of operating margin, teaching hospitals again showed higher levels of performance across the three quartiles; however, a higher percentage of non-teaching hospitals (72%) versus teaching hospitals (69%) showed an operating surplus in FY05. Only one teaching and two non-teaching hospitals showed a negative non-operating margin

Results between the two groups were mixed with regard to liquidity. On average, Current Ratio was higher for teaching hospitals; however, a higher percentage (88%) of non-teaching hospitals had Current Ratios above the minimum industry benchmark of 1.0 (compared to 81% of teaching hospitals). In terms of collecting receivables due, the results were mixed depending on the quartile; however, non-teaching hospitals were quicker at paying current obligations across all three quartiles.

In terms of solvency, teaching hospitals are generally stronger. A slightly higher percentage of non-teaching hospitals—14% versus 13% for teaching hospitals—will have more difficulty meeting interest and principal payments in the upcoming year. In addition, teaching hospitals performed better in terms of repaying current and non-current debt, for the most part, and were substantially less leveraged as 75% (versus 66% of non-teaching hospitals) were above the 30% benchmark for Equity Financing.

Summary

The majority of hospitals reported improved overall profitability in FY05, with 80% experiencing total gains and only 20% of the industry experiencing total losses. Overall, the industry demonstrated improved liquidity, with a majority of hospitals comfortably able to meet short-term obligations. In addition, solvency improved for most of the industry; however, the ability to cover long-term obligations remained a serious concern for one-third of Massachusetts hospitals.

Financial ratios for each hospital are on the Hospital Fact Sheets in the DHCFP Data Catalog at www.mass.gov/dhcfp. Hospital-specific dollar surplus or loss, net patient service revenue, total net assets, and assets whose use is limited are also provided on the Fact Sheets illustrating the magnitude of hospital surplus and loss, the size of operation, and the size of reserves.

¹ The findings in this report are based on the financial filings of 65 acute care hospitals. One hospital—Quincy Medical Center—did not submit its filing in time to be included in this report. Due to the Vanguard purchase of MetroWest and Saint Vincent's hospitals, the fiscal year filings submitted represent six months of operation.

² Depending on the organization of each hospital, data may exclude other aspects of some hospitals' financial health, such as performance of endowments or the financial health of parent or other affiliated organizations.

³ Quartile values can shed light on information about the distribution of financial ratio values across hospitals. Often, averages can be materially affected by outlier/extreme values at the low and high ends of a distribution. Examining quartiles, therefore, is a preferred means of assessing the overall distribution of values across hospitals. For instance, the ratio values of one-quarter of the hospitals at the low end of the distribution will fall at or below the 25th quartile value. Similarly, the ratio values of one-quarter of the hospitals at the high end of the distribution will fall at or above the 75th quartile value. The 50th percentile is the median, or the center of the distribution of values. Half of the hospitals' financial ratio values will fall below the median, and half will fall above the median. These quartile measures are particularly useful when a distribution is markedly skewed, or where it is generally symmetrical but includes a few outliers.

⁴ Ratio of total income to total revenue.

⁵ Ratio of operating income to total revenue.

⁶ Ratio of non-operating income to total revenue.

⁷ Ratio of current assets to current liabilities.

⁸ Ratio of net patient accounts receivable to net patient service revenue/quarters of data * 91.25.

⁹ Ratio of current liabilities less estimated third-party settlements to total expenses less depreciation and amortization/quarters of data * 91.25.

¹⁰ A Current Ratio value of 1.0 indicates that a hospital has one dollar held in current assets per dollar of current liabilities. Values below 1.0 are considered strongly unfavorable and highlight an organization's illiquid position.

¹¹ Ratio of total income plus interest expense plus depreciation and amortization to interest expense plus current portion of long-term debt.

¹² Ratio of total income plus depreciation and amortization to total current liabilities plus total long-term debt.

¹³ Ratio of total net assets to total assets.

Quarterly Acute Hospital Financial Report, FY06 Q1

In FY06 Q1, hospital industry profitability dipped below FY05 levels. This decrease is primarily attributable to operating margin performance, which often dips in the first quarter. Further, while profitability decreased in FY06 Q1, fewer hospitals showed total losses. A large majority of the industry (82%) continued to comfortably meet short-term obligations and accounts receivable, and payment periods continued to improve. Finally, solvency was stable for the majority of the industry; however, the ability to cover long-term obligations remained a serious concern for just under one-third of Massachusetts hospitals.

About this Report

The Division of Health Care Finance and Policy (the Division) publishes quarterly acute hospital financial reports in response to a legislative mandate to provide an annual assessment of financial trends in the acute care hospital industry. Quarterly reporting is one part of the Division's ongoing program to better protect the public interest by continuously monitoring the financial condition of acute care hospitals. This report presents an industry-wide analysis from FY02 through FY06 Quarter 1 (Q1).^{1,2} Financial trends for individual hospitals are on each hospital's Fact Sheet in the DHCFP Data Catalog at www.mass.gov/dhcfp.

Trends in financial ratio analysis can provide useful information about the hospital industry's financial condition. The three areas examined on a quarterly basis and discussed in this report are profitability, liquidity, and solvency.³

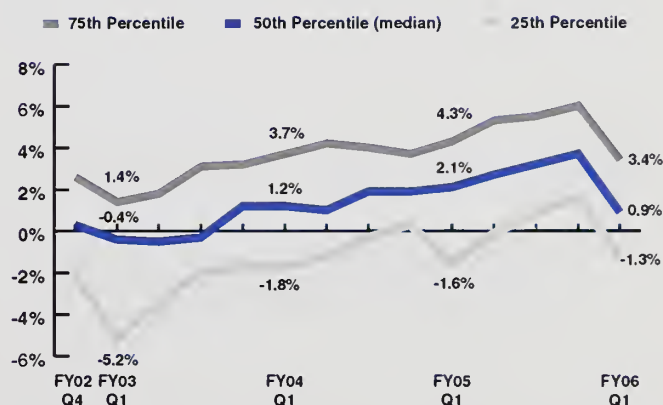
Profitability

Although most Massachusetts acute care hospitals are non-profit, they do need to generate a sufficient surplus in order to complete their missions, repay debt, and invest in the future of their organizations. Therefore, an analysis of the industry's profitability using three key ratios is reported here. Figures 1,

2, and 3 show FY02 through FY06 Q1 trends for 25th, 50th (median) and 75th quartile values⁴ for Total Margin,⁵ Operating Margin,⁶ and Non-operating Margin.⁷

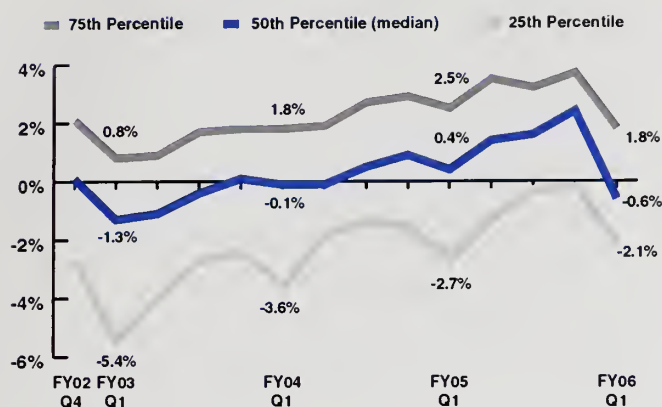
Profitability often dips in the first quarter of each year due to seasonal drops in utilization (see Figures 1 through 3). All three margins dipped in FY06 Q1, but both Total and Operating profitability levels were higher for the lower quartile than they were in FY05 Q1. Further, although levels were lower than the previous year for the upper two quartiles, fewer hospitals overall showed total losses when compared to FY05 Q1. For reference, Figure 4 provides annual measures of total profitability.

Figure 1
Total Margin Trend by Quarter, FY02-FY06 Q1



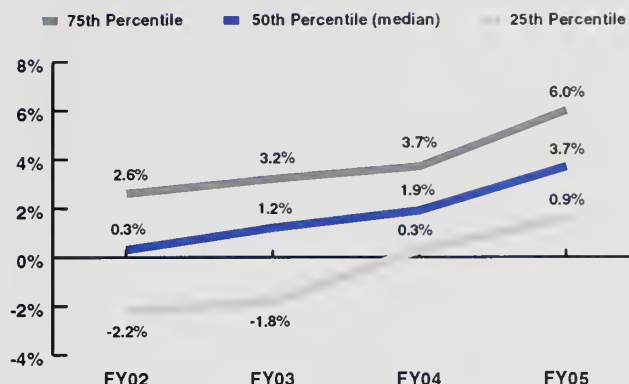
- Overall profitability dipped across the industry in FY06 Q1; however, fewer hospitals experienced losses.

Figure 2
Operating Margin Trend by Quarter,
FY02-FY06 Q1



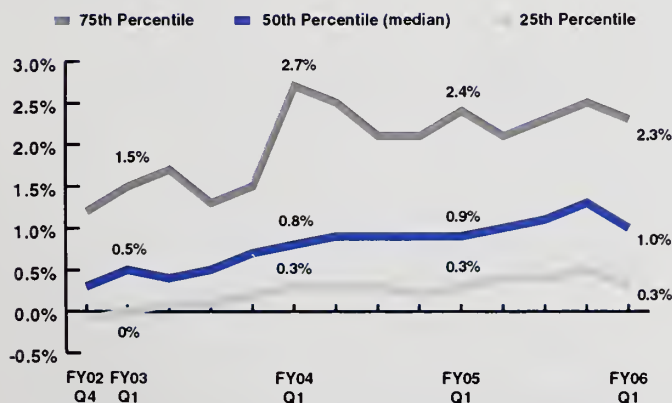
- Operating performance dipped across the industry in FY06 Q1. This is a predictable first quarter dip due to seasonal variations in volume.

Figure 4
Annual Total Margin, FY02-FY05



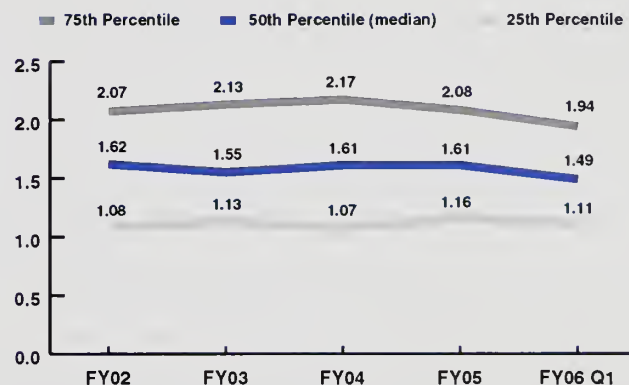
- Annual Margins are provided as a reference.

Figure 3
Non-operating Margin Trend by Quarter,
FY02-FY06 Q1



- Non-operating Margins decreased slightly in FY05 Q1, and six hospitals reported non-operating losses.

Figure 5
Current Ratio Trend, FY02-FY06 Q1



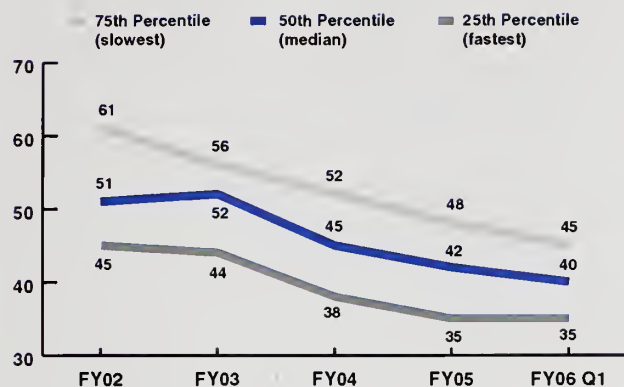
- Current Ratio decreased slightly across the industry; however, a majority of hospitals (82%) maintained Current Ratios above the 1.0 benchmark in FY06 Q1.

Liquidity

Liquidity ratios indicate a hospital's ability to meet its short-term obligations. Deterioration of these ratios is one indication of financial stress. Three liquidity ratios are reported here: Current Ratio,⁸ Average Days in Accounts Receivable (A/R),⁹ and Average Payment Period.¹⁰ Figures 5, 6, and 7 show trends in quartile values for these three ratios.

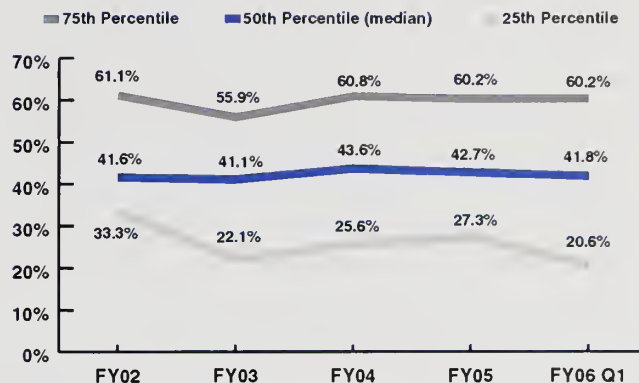
Compared to FY05, the majority of hospitals demonstrated a slightly lower ability to meet current obligations in FY06 Q1; nevertheless, a large majority of hospitals (82%) performed above the 1.0 minimum benchmark (see Figure 5).¹¹ In addition, the industry showed more efficient management of Days in A/R (see Figure 6) and improvement in the average time to pay current liabilities (Average Payment Period,

Figure 6
Days in Accounts Receivable Trend, FY02-FY06 Q1



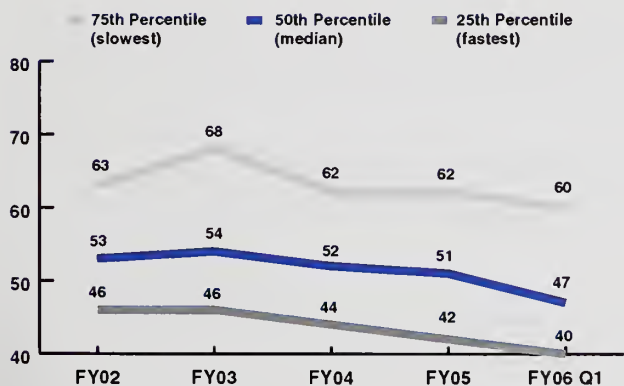
- Following the industry's positive trend since FY02, hospitals continued to improve collection of receivables in FY06 Q1. Median Days in A/R decreased by two days over FY05.

Figure 8
Equity Financing Trend, FY02-FY06 Q1



- Equity Financing Ratios were stable for most of the industry in FY06 Q1; however, just under one-third of the hospitals were below the 30% benchmark. The highly leveraged position of some hospitals may make future asset acquisition difficult for this group.

Figure 7
Average Payment Period Trend in Days, FY02-FY06 Q1



- Average Payment Period decreased across all quartiles in FY06 Q1; however, close to 30% of hospitals paid current obligations at a faster rate than they collected receivables.

Solvency

Solvency ratios provide information regarding both how an organization finances its assets and how able an organization is to take on new debt. Deterioration of these ratios is another indication of problems in the financial health of an organization. Solvency ratios of Debt Service Coverage and Cash Flow to Total Debt are not included in this report because annualized data are necessary to accurately present these ratios. For quarterly analysis, only one solvency ratio is reported: Equity Financing.¹²

The Equity Financing ratio, measured by the proportion of total assets financed by equity, reflects the ability of a hospital to take on more debt. Low values indicate that a hospital is highly leveraged, and therefore, may have difficulty securing access to debt financing for further asset acquisition. Equity Financing remained stable for the majority of hospitals in FY06 Q1 compared to FY05 (see Figure 8); however this ratio was below the 30% industry benchmark for just under one-third of the hospitals, indicating long-term solvency issues for this group.

Teaching versus Non-teaching Hospitals

The Division also examines the financial health of teaching and non-teaching hospitals using financial ratio analysis. In terms of total and operating profitability, teaching hospitals outperformed non-teaching hospitals, with a lower percentage

see Figure 7) across all quartiles. Close to 30% of hospitals, however, are paying current obligations at a faster rate than they are collecting payments; this could lead to cash flow constraints for this group of hospitals in the future.

of teaching hospitals experiencing overall losses. In terms of non-operating performance, teaching hospitals showed higher levels of non-operating gains; however, a much larger percentage (31%) of teaching hospitals experienced non-operating losses (albeit small) compared to non-teaching hospitals. Only one non-teaching hospital experienced a non-operating loss.

Results were mixed with regard to liquidity. Median Current Ratio was slightly higher for teaching hospitals in the upper two quartiles; however, a higher percentage of teaching hospitals (25%) versus non-teaching hospitals (17%) experienced Current Ratios below the minimum industry benchmark of 1.0. Both teaching and non-teaching hospitals exhibited comparable improvement in collecting receivables due and paying current obligations.

Non-teaching hospitals may have more difficulty meeting interest and principal payments in the upcoming year as 35% (versus 25% for teaching hospitals) were below the 30% benchmark for Equity Financing in FY06 Q1. Non-teaching hospitals were slightly more leveraged than teaching hospitals, and there was some improvement in Equity Financing for the lower and middle quartiles of teaching hospitals.

Summary

Overall profitability dipped in FY06 Q1, as it often does in the first quarter of each year; however, for at least the lower quartile, profit levels were higher in FY06 Q1 than they were in FY05 Q1 and fewer hospitals overall showed total losses. Further, we expect profit levels to be more favorable in ensuing quarters. Although current ratio dipped slightly across the three quartiles, a majority of hospitals (82%) were still able to meet their current obligations. In addition, management of receivables improved across the industry, as did payment period. Finally, solvency was stable for most of the industry; however, the ability to cover long-term obligations remained a serious concern for just under one-third of Massachusetts hospitals.

Financial ratio values for each hospital are on the Hospital Fact Sheets in the Division of Health Care Finance and Policy Data Catalog at www.mass.gov/dhcfp. Hospital-specific dollar surplus or loss, net patient service revenue, total net assets, and assets whose use is limited are also provided on the Hospital Fact Sheets illustrating the magnitude of hospital surplus and loss, the size of operation, and the size of reserves.

¹ The FY06 Q1 findings in this report are based on the financial filings of 65 acute care hospitals. One hospital (Mercy) has a fiscal year that ends on December 31, thus FY06 Q1 data were unavailable at the time of this analysis. Six other hospitals (Cape Cod, Falmouth, Massachusetts Eye and Ear, Nashoba Valley, North Adams, and Quincy Hospitals) had not filed their FY05 annual filings at the time of this analysis; therefore, their FY05 data are not included in this report.

² The AICPA Accounting and Audit Guide for Health Care Organizations has changed the method of accounting and auditing for Alternative Investments. Where a hospital holds a 5% or greater ownership of such investments, the hospital must report these investments using the Equity Method. The effect of using the Equity Method is that income or losses from these investments will now be reported as non-operating gains (losses), as opposed to a change in net assets.

³ Depending on the organization of each hospital, data may exclude other aspects of some hospitals' financial health, such as performance of endowments or the financial health of parent or other affiliated organizations.

⁴ Quartile values can shed light on information about the distribution of financial ratio values across hospitals. Often, averages can be materially affected by outlier/extreme values at the low and high ends of a distribution. Examining quartiles, therefore, is a preferred means of assessing the overall distribution of values across hospitals. For instance, the ratio values of one-quarter of the hospitals at the low end of the distribution will fall at or below the 25th quartile value. Similarly, the ratio values of one-quarter of the hospitals at the high end of the distribution will fall at or above the 75th quartile value. The 50th percentile is the median, or the center of the distribution of values. Half of the hospitals' financial ratio values will fall below the median, and half will fall above the median. These quartile measures are particularly useful when a distribution is markedly skewed, or where it is generally symmetrical but includes a few outliers.

⁵ Ratio of total income to total revenue.

⁶ Ratio of operating income to total revenue.

⁷ Ratio of non-operating income to total revenue.

⁸ Ratio of current assets to current liabilities.

⁹ Ratio of net patient accounts receivable to net patient service revenue/quarters of data * 91.25.

¹⁰ Ratio of current liabilities less estimated third-party settlements to total expenses less depreciation and amortization/quarters of data * 91.25.

¹¹ A Current Ratio value of 1.0 indicates that a hospital has one dollar held in current assets per dollar of current liabilities. Values below 1.0 are considered strongly unfavorable and highlight an organization's illiquid position.

¹² Ratio of total net assets to total assets.

Information from the Division of Health Care Finance and Policy

Quarterly Acute Hospital Financial Report, FY06 Q2

In FY06 Q2, hospital industry profitability improved; approximately 72% of hospitals experienced positive Total Margins versus 63% in the first quarter. In addition, this percentage was generally stable compared to the second quarter of the previous year. Further, a large majority of the industry (80%) was comfortably able to meet short-term obligations, and accounts receivable and payment periods continued to improve for the most part. Finally, decreasing equity financing values indicate additional debt financing for hospitals, while the ability to cover long-term obligations remained a serious concern for 35% of Massachusetts hospitals.

About this Report

The Division of Health Care Finance and Policy (the Division) publishes quarterly acute hospital financial reports in response to a legislative mandate to provide an annual assessment of financial trends in the acute care hospital industry. Quarterly reporting is one part of the Division's ongoing program to better protect the public interest by continuously monitoring the financial condition of acute care hospitals. This report presents an industry-wide analysis from FY02 through FY06 Quarter 2 (Q2).^{1,2} Financial trends for individual hospitals are on each hospital's Fact Sheet in the DHCFP Data Catalog at www.mass.gov/dhcfp.

Trends in financial ratio analysis can provide useful information about the hospital industry's financial condition. The three areas examined on a quarterly basis and discussed in this report are profitability, liquidity, and solvency.³

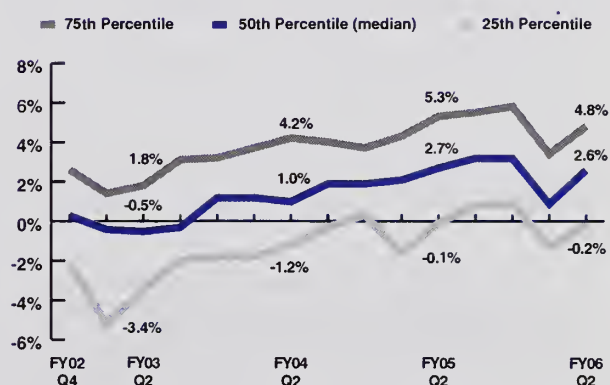
Profitability

Although most Massachusetts acute care hospitals are non-profit, they do need to generate a sufficient surplus in order to complete their missions, repay debt, and invest in the future of their organizations. Therefore, an analysis of the industry's profitability using three key ratios is reported here. Figures 1,

2, and 3 show FY02 through FY06 Q2 trends for 25th, 50th (median) and 75th quartile values⁴ for Total Margin,⁵ Operating Margin,⁶ and Non-operating Margin.⁷

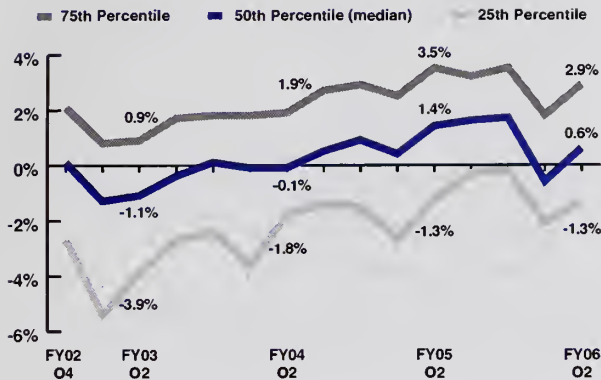
Profitability levels improved markedly in FY06 Q2 (see Figures 1 through 3) for all three quartiles when compared to the first quarter and were fairly stable for the lower two quartiles when compared to the same quarter of the previous year. Operating margin, slightly below FY05 Q2 levels for the upper two quartiles, improved markedly when compared to FY06 Q1. Non-operating margin improved for all three quartiles in FY06 Q2 when compared to the first quarter. For reference, Figure 4 provides annual measures of total profitability.

Figure 1
Total Margin Trend by Quarter, FY02-FY06 Q2



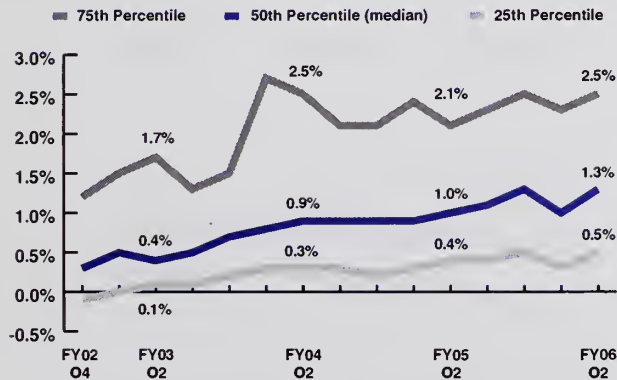
- Following a predictable dip in the first quarter, overall profitability improved in FY06 Q2 across all three quartiles, and was generally stable when compared to the same quarter of the previous year.

Figure 2
Operating Margin Trend by Quarter,
FY02-FY06 Q2



- As expected, hospital operating performance improved across all three quartiles in FY06 Q2 compared to FY06 Q1, but was slightly lower for the upper two quartiles when compared to FY05 Q2.

Figure 3
Non-operating Margin Trend by Quarter,
FY02-FY06 Q2

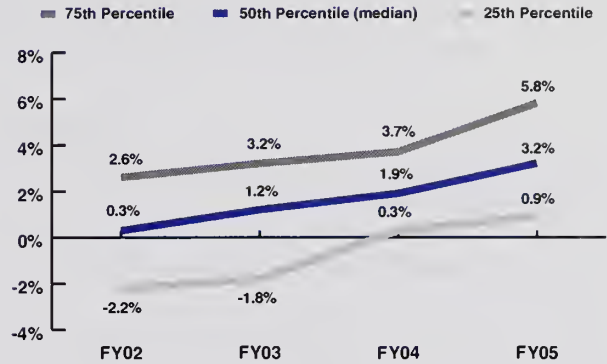


- Non-operating margin improved for all three quartiles in FY06 Q2 compared to FY06 Q1, and was higher when compared with the second quarter of FY05. Only five hospitals reported non-operating losses in FY06 Q2.

Liquidity

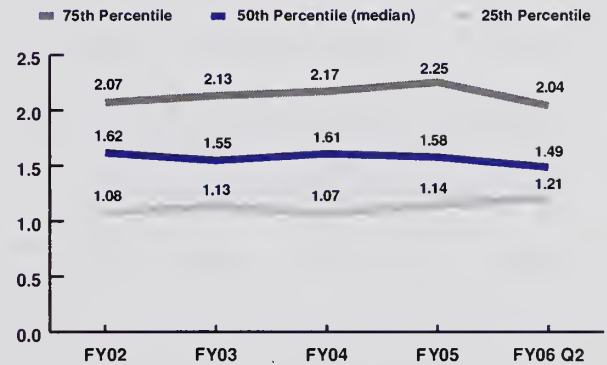
Liquidity ratios indicate a hospital's ability to meet its short-term obligations. Deterioration of these ratios is one indication of financial stress. Three liquidity ratios are reported here: Current Ratio,⁸ Average Days in Accounts Receivable (A/R),⁹

Figure 4
Annual Total Margin, FY02-FY05



- Annual Margins are provided as a reference.

Figure 5
Current Ratio Trend, FY02-FY06 Q2

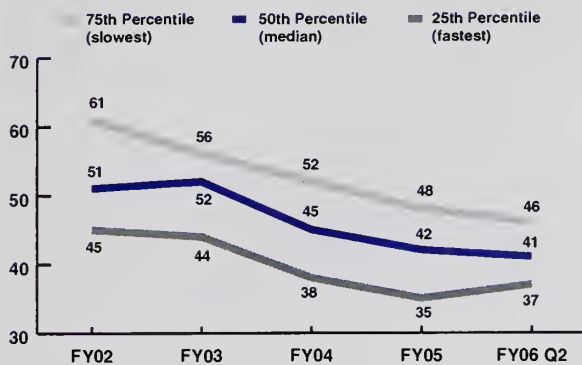


- Compared to FY05, Current Ratio decreased for the upper two quartiles, but improved for the lower quartile in FY06 Q2. More than 80% of the industry maintained a Current Ratio above the 1.0 benchmark in the second quarter.

and Average Payment Period.¹⁰ Figures 5, 6, and 7 show trends in quartile values for these three ratios.

Compared to FY05, the majority of hospitals demonstrated a slightly lower ability to meet current obligations in FY06 Q2; nevertheless, a large majority (80%) of hospitals operated

Figure 6
Days in Accounts Receivable Trend, FY02-FY06 Q2



- Following the industry's positive trend since FY02, hospitals continued to improve collection of receivables in FY06 Q1. Median Days in A/R decreased by two days over FY05.

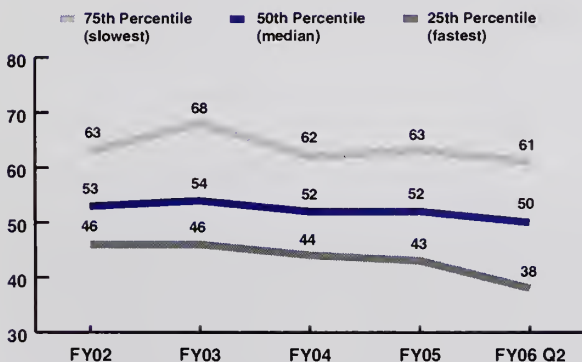
the industry showed continued improvement across all quartiles in the average time to pay current liabilities (Average Payment Period, see Figure 7). Close to 30% of hospitals, however, are paying current obligations at a faster rate than they are collecting payments; this could lead to cash flow constraints for this group of hospitals in the future.

Solvency

Solvency ratios provide information regarding both how an organization finances its assets and how able an organization is to take on new debt. Deterioration of these ratios is another indication of problems in the financial health of an organization. Solvency ratios of Debt Service Coverage and Cash Flow to Total Debt are not included in this report because annualized data are necessary to accurately present these ratios. For quarterly analysis, only one solvency ratio is reported: Equity Financing.¹²

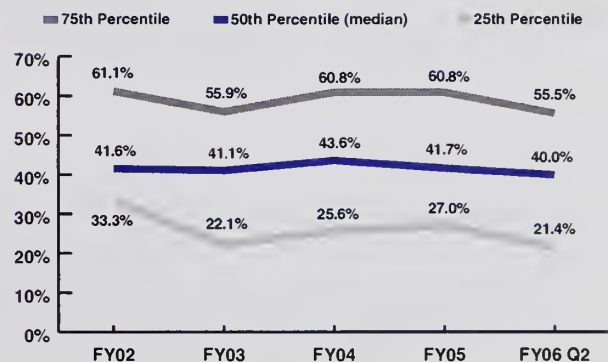
The Equity Financing ratio, measured by the proportion of total assets financed by equity, reflects the ability of a hospital

Figure 7
Average Payment Period Trend in Days, FY02-FY06 Q2



- Average Payment Period decreased across all quartiles in FY06 Q1; however, close to 30% of hospitals paid current obligations at a faster rate than they collected receivables.

Figure 8
Equity Financing Trend, FY02-FY06 Q2



- Equity Financing Ratios decreased slightly for all three quartiles in FY06 Q2. Further, 35% of the hospitals were below the 30% benchmark. The highly leveraged position of these hospitals may make future asset acquisition difficult for this group.

above the 1.0 minimum benchmark (see Figure 5).¹¹ In addition, although the lower quartile gained 2 days in Accounts Receivables, the majority of the industry showed more efficient management of Days in A/R (see Figure 6). Similarly,

to take on more debt. Low values indicate that a hospital is highly leveraged and could have difficulty securing access to debt financing for further asset acquisition. Equity financing decreased slightly for all three quartiles in FY06 Q2, but is

above the benchmark for the upper and middle quartiles. The decrease may signal increased long-term debt as hospitals refurbish, add new services, and buy or lease new equipment. Equity Financing, however, was below the 30% industry benchmark for 35% of the hospitals, indicating long-term solvency issues for this group.

Teaching versus Non-teaching Hospitals

The Division also examines the financial health of teaching and non-teaching hospitals using financial ratio analysis. In terms of total and operating profitability, teaching hospitals outperformed non-teaching hospitals, with a lower percentage of teaching hospitals experiencing overall losses. In terms of non-operating performance, teaching hospitals showed higher levels of non-operating gains; however, a much larger percentage (19%) of teaching hospitals experienced non-operating losses (albeit small) compared to non-teaching hospitals (4%).

Results were mixed with regard to liquidity. Although Current Ratio was slightly higher for teaching hospitals in the upper and lower quartiles, only three teaching hospitals and 10 non-teaching hospitals operated below the minimum industry benchmark of 1.0. Teaching hospitals, however, increased their Days in A/R and Average Payment Period, while non-teaching hospitals remained fairly stable on Accounts Receivable, and improved over FY06 Q1 in paying current obligations.

Non-teaching hospitals may have more difficulty borrowing in the upcoming year as 39% (versus 25% for teaching hospitals) were below the 30% benchmark for Equity Financing in FY06 Q2. For non-teaching hospitals, this represents a 5% increase over FY05 in the percentage of hospitals below the benchmark.

Summary

As expected, overall profitability improved in FY06 Q2 relative to Q1, and the percentage of hospitals with negative margins decreased as well. Total profitability was also generally stable when compared to FY05 Q2. Although Current Ratio was slightly lower in the upper two quartiles relative to FY05, a large majority of hospitals (80%) were still able to meet their current obligations. In addition, management of receivables for the most part improved across the industry, as did payment period. Finally, equity financing was slightly lower than FY06 Q1 and FY05 levels, indicating an increase in debt financing for asset acquisition. In addition, the ability to cover long-term obligations remained a serious concern for 35% of the industry.

Financial ratio values for each hospital are on the Hospital Fact Sheets in the Division of Health Care Finance and Policy Data Catalog at www.mass.gov/dhcfp. Hospital-specific dollar surplus or loss, net patient service revenue, total net assets, and assets whose use is limited are also provided on the Hospital Fact Sheets illustrating the magnitude of hospital surplus and loss, the size of operation, and the size of reserves.

¹ The FY06 Q2 findings in this report are based on the financial filings of 65 acute care hospitals. One hospital (Mercy Medical Center) has a fiscal year that ends on December 31st, thus FY06 Q2 data represent only the first quarter of the fiscal year. Three hospitals (Cambridge Health Alliance, Metrowest Medical Center and St. Vincent Hospital) have fiscal years that end on June 30; therefore these hospitals' data represent the first three quarters of operation. Martha's Vineyard Hospital's fiscal year ends on March 31, thus its FY06 Q2 data represent the full fiscal year. Falmouth Hospital had not filed its FY06 Q2 filing at the time of this analysis and is therefore not included in this report.

² The AICPA Accounting and Audit Guide for Health Care Organizations has changed the method of accounting and auditing for Alternative Investments. Where a hospital holds a 5% or greater ownership of such investments, the hospital must report these investments using the Equity Method. The effect of using the Equity Method is that income or losses from these investments are reported as non-operating gains (losses), as opposed to a change in net assets.

³ Depending on the organization of each hospital, data may exclude other aspects of some hospitals' financial health, such as performance of endowments or the financial health of parent or other affiliated organizations.

⁴ Quartile values can shed light on information about the distribution of financial ratio values across hospitals. Often, averages can be materially affected by outlier/extreme values at the low and high ends of a distribution. Examining quartiles, therefore, is a preferred means of assessing the overall distribution of values across hospitals. For instance, the ratio values of one-quarter of the hospitals at the low end of the distribution will fall at or below the 25th quartile value. Similarly, the ratio values of one-quarter of the hospitals at the high end of the distribution will fall at or above the 75th quartile value. The 50th percentile is the median, or the center of the distribution of values. Half of the hospitals' financial ratio values will fall below the median, and half will fall above the median. These quartile measures are particularly useful when a distribution is markedly skewed, or where it is generally symmetrical but includes a few outliers.

⁵ Ratio of total income to total revenue.

⁶ Ratio of operating income to total revenue.

⁷ Ratio of non-operating income to total revenue.

⁸ Ratio of current assets to current liabilities.

⁹ Ratio of net patient accounts receivable to net patient service revenue/quarters of data * 91.25.

¹⁰ Ratio of current liabilities less estimated third-party settlements to total expenses less depreciation and amortization/quarters of data * 91.25.

¹¹ A Current Ratio value of 1.0 indicates that a hospital has one dollar held in current assets per dollar of current liabilities. Values below 1.0 are considered strongly unfavorable and highlight an organization's illiquid position.

¹² Ratio of total net assets to total assets.



Information from the Division of Health Care Finance and Policy

Quarterly Acute Hospital Financial Report, FY06 Q3

Overall profitability in FY06 Q3 improved across the board when compared to the previous quarter, and despite a slight decrease in the upper quartile, was fairly stable when compared to the same quarter last year. In addition, 77% of hospitals experienced positive Total Margins. Further, a large majority of the industry (83%) was comfortably able to meet short-term obligations, and accounts receivable and payment periods continued to improve. Finally, decreasing equity financing values indicate additional debt financing for hospitals, while the ability to cover long-term obligations remained a serious concern for 35% of Massachusetts hospitals.

About this Report

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Trends in financial ratio analysis can provide useful information about the hospital industry's financial condition. The three areas examined on a quarterly basis and discussed in this report are profitability, liquidity, and solvency.³

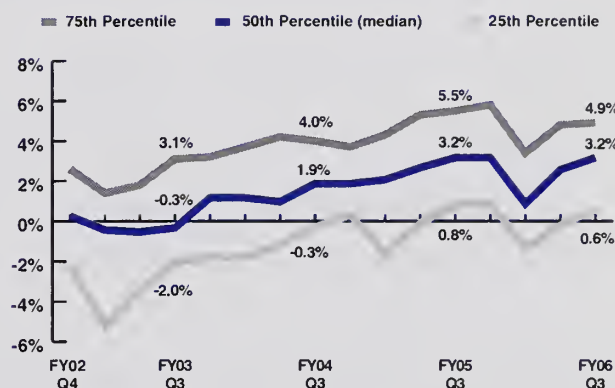
Profitability

Although most Massachusetts acute care hospitals are non-profit, they do need to generate a sufficient surplus in order to complete their missions, repay debt, and invest in the future of their organizations. Therefore, an analysis of the industry's profitability using three key ratios is reported here. Figures 1, 2, and 3 show FY02 through FY06 Q3 trends for 25th, 50th

(median) and 75th quartile values⁴ for Total Margin,⁵ Operating Margin,⁶ and Non-operating Margin.⁷

While overall profitability was slightly lower for the upper quartile when compared to the third quarter of FY05, it was fairly stable for the middle and lower quartiles, and all three quartiles improved when compared to the second quarter of

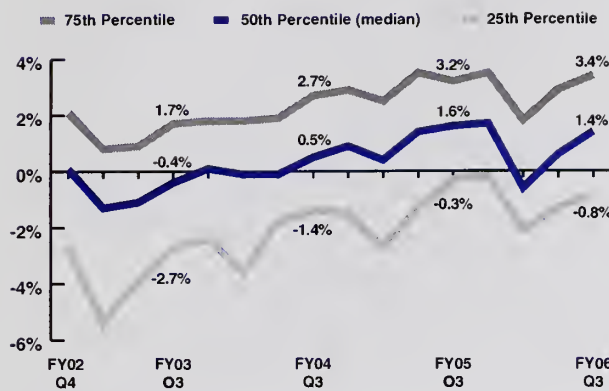
Figure 1
Total Margin Trend by Quarter, FY02-FY06 Q3



- Overall profitability in FY06 Q3 improved across the board compared to FY06 Q2 and was fairly stable when compared to FY05 Q3. In addition, 77% of the industry had positive margins in FY06 Q3.

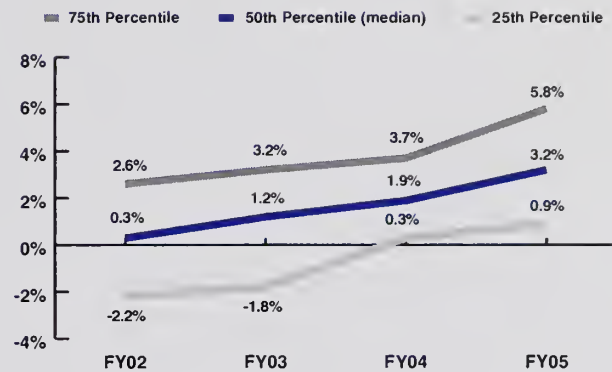
FY06 (see Figures 1 through 3). Operating margin was slightly below the FY05 Q3 levels for the middle and lower quartiles, but improved in the upper quartile. All three quartiles improved when compared to FY06 Q2. Non-operating margin also improved in FY06 Q3 when compared with both the same quarter last year and the previous quarter in FY06. For reference, Figure 4 provides annual measures of total profitability.

Figure 2
Operating Margin Trend by Quarter,
FY02-FY06 Q3



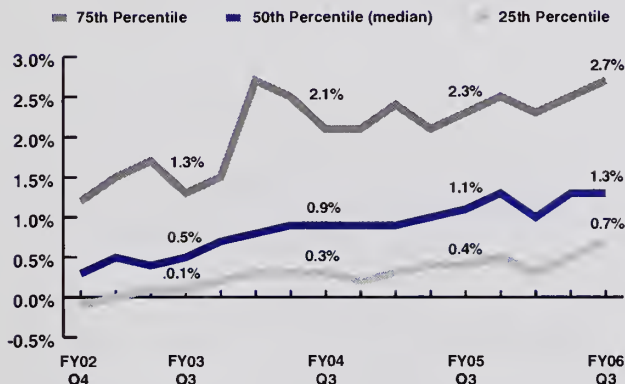
- Operating Margin improved across all three quartiles compared to FY06 Q2. It was slightly below FY05 Q3 levels for the two lower quartiles, but improved in the upper quartile.

Figure 4
Annual Total Margin, FY02-FY05



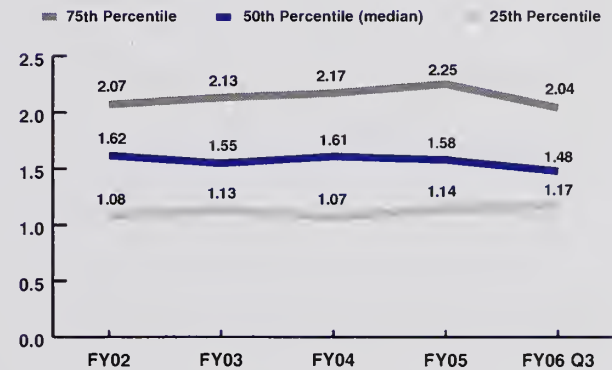
- Annual Margins are provided as a reference.

Figure 3
Non-operating Margin Trend by Quarter,
FY02-FY06 Q3



- Non-operating margin improved over FY05 Q3 and FY06 Q2. Only three hospitals reported non-operating losses in FY06 Q3.

Figure 5
Current Ratio Trend, FY02-FY06 Q3



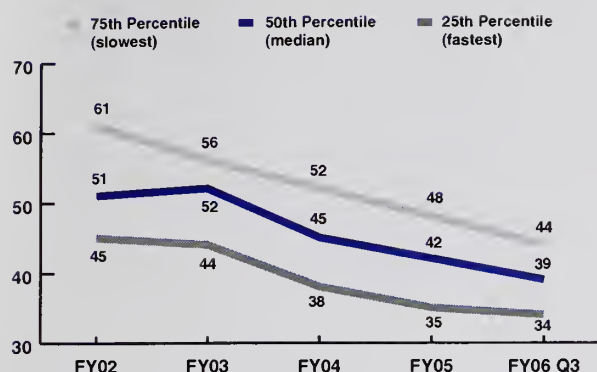
- Current Ratio was lower for all three quartiles when compared to FY05 Q3; nevertheless, 83% of the industry maintained a Current Ratio above the 1.0 benchmark in FY06 Q3.

Liquidity

Liquidity ratios indicate a hospital's ability to meet its short-term obligations. Deterioration of these ratios is one indication of financial stress. Three liquidity ratios are reported here: Current Ratio,⁸ Average Days in Accounts Receivable (A/R),⁹ and Average Payment Period.¹⁰ Figures 5, 6, and 7 show trends in quartile values for these three ratios.

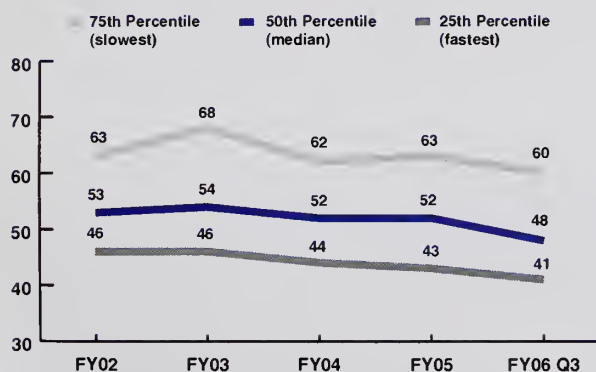
Compared to FY05, the majority of hospitals demonstrated a slightly lower ability to meet current obligations in FY06 Q3; nevertheless, a large majority (83%) of hospitals operated above the 1.0 minimum benchmark (see Figure 5).¹¹ In addition, all three quartiles decreased their Days in Accounts Receivable when compared to FY05. Similarly, the industry showed continued improvement across all quartiles in the

Figure 6
Days in Accounts Receivable Trend, FY02-FY06 Q3



- Following the industry's positive trend since FY02, hospitals continued to improve collection of receivables in FY06 Q3. Median Days in A/R decreased by eight, six and four days respectively for the upper, middle and lower quartiles.

Figure 7
Average Payment Period Trend, FY02-FY06 Q3



- Average Payment Period also decreased across all quartiles in FY06 Q3; in addition, the percentage of hospitals paying current obligations at a faster rate than they are collecting receivables remained stable at 27%.

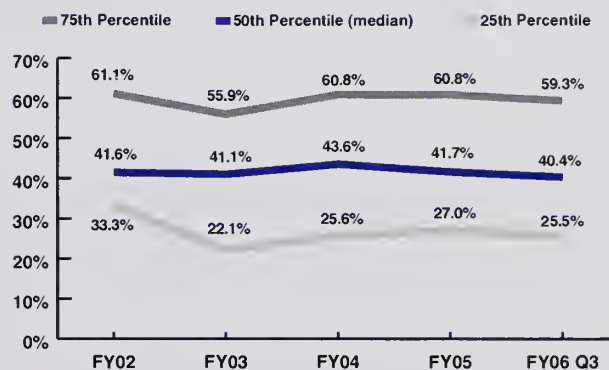
average time to pay current liabilities (Average Payment Period, see Figure 7). Finally, the percentage of hospitals paying current obligations at a faster rate than they are collecting payments remained fairly stable at 27% in FY06 Q3; this could lead to cash flow constraints for this group of hospitals in the future.

Solvency

Solvency ratios provide information regarding both how an organization finances its assets and how able an organization is to take on new debt. Deterioration of these ratios is another indication of problems in the financial health of an organization. Solvency ratios of Debt Service Coverage and Cash Flow to Total Debt are not included in this report because annualized data are necessary to accurately present these ratios. For quarterly analysis, only one solvency ratio is reported: Equity Financing.¹²

The Equity Financing ratio, measured by the proportion of total assets financed by equity, reflects the ability of a hospital to take on more debt. Low values indicate that a hospital is highly leveraged and could have difficulty securing access to debt financing for further asset acquisition. Equity financing decreased slightly for all three quartiles in FY06 Q3, but was above the benchmark for

Figure 8
Equity Financing Trend, FY02-FY06 Q3



- Equity Financing Ratios decreased slightly for all three quartiles in FY06 Q3, but were above the industry benchmark for the upper two quartiles. Thirty-five percent of hospitals were below the 30% benchmark. The highly leveraged position of these hospitals may make future asset acquisition difficult for this group.

the upper and middle quartiles. The decrease may signal increased long-term debt as hospitals refurbish, add new services, and buy or lease new equipment. Equity Financing, however, was below the 30% industry benchmark for 35% of the hospitals, indicating long-term solvency issues for this group.

Teaching versus Non-teaching Hospitals

The Division also examines the financial health of teaching and non-teaching hospitals using financial ratio analysis. In terms of total profitability, teaching hospitals outperformed non-teaching hospitals, with a lower percentage of teaching hospitals experiencing overall losses, and all three quartiles at higher levels for teaching versus non-teaching hospitals. Twenty-eight percent of non-teaching hospitals experienced total losses in FY06 Q3 versus 6.3% for teaching hospitals. In terms of operating performance, a higher percentage of teaching hospitals (37.5%) experienced losses versus non-teaching hospitals (34%); however, all three quartiles were higher for teaching hospitals. Finally, only one teaching hospital and two non-teaching hospitals experienced non-operating losses.

With regard to liquidity, there was very little difference between the two groups, with teaching hospitals only slightly better than non-teaching hospitals. Median Current Ratio was equal for both groups. Days in A/R were slightly lower for teaching hospitals, while Average Payment Period was slightly higher. Finally, teaching hospitals fared better in terms of Equity Financing, with a higher percentage of non-teaching hospitals (38%) versus teaching hospitals (25%) falling below the industry standard, indicating that

non-teaching hospitals may have more difficulty borrowing in the upcoming year.

Summary

Median Total Margin improved across the board in FY06 Q3 when compared to FY06 Q2 and remained fairly stable when compared to the same quarter last year. Current Ratio was slightly lower in the third quarter, but a large majority of hospitals (83%) were still able to meet their current obligations, and both management of receivables and Average Payment Period improved across the industry. Finally, although Equity Financing was slightly lower than FY05, indicating an increase in debt financing for asset acquisition, it was above the benchmark for the majority of the industry. Nevertheless, the ability to cover long-term obligations remained a serious concern for 35% of the industry.

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